

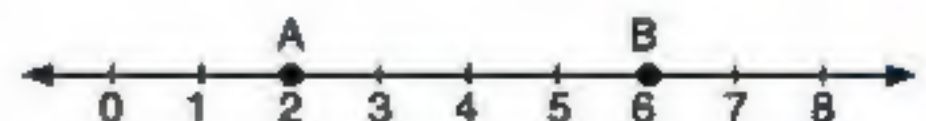
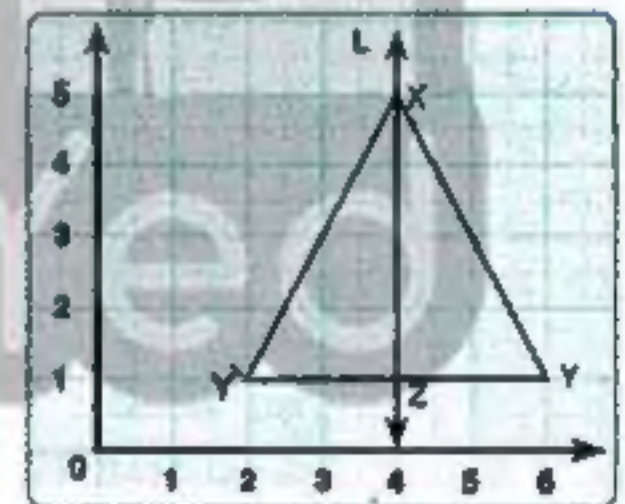
Model Tests from The School Book

Model Test

1

1 Choose the correct answer from those between brackets:

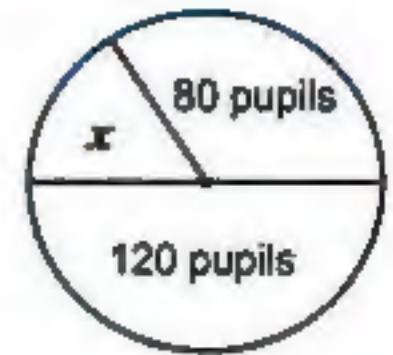
- 1) $7 - 5 \dots\dots \mathbb{N}$. (\in , \notin , \subset or \supset)
- 2) The set of even numbers (\mathbb{E}) \cap the set of prime numbers (\mathbb{P}) = $\dots\dots$ (\mathbb{P} , \mathbb{N} , \mathbb{O} or $\{2\}$)
- 3) If we add 3 to twice a number x then we get the number $\dots\dots$ ($3x$, $3 + x$, $2x + 3$ or $2x$)
- 4) $(93 + 7) - (7 + 93) = \dots\dots$ (0 , 10 , 100 or $1\,000$)
- 5) The perimeter of an equilateral triangle whose side length l cm = $\dots\dots$
($l + 3$, $3l$, $6 + l$ or $6l$)
- 6) If the area of a triangle is 20 cm^2 and its height is 5 cm , then the length of the corresponding base = $\dots\dots\text{ cm}$. (4 , 8 , 16 or 64)
- 7) The circumference of circle whose radius length is $4\text{ cm} = \pi \times \dots\dots\text{ cm}$. (4 , 8 , 16 or 10)
- 8) In the opposite figure:
the triangle XYZ is transformed to the triangle $X'Y'Z'$, so this transformation is called $\dots\dots$ (reflection, rotation, translation or otherwise)
- 9) $(4 \times 31) \times 25 = (31 \times \dots\dots) \times 25$. (2 , 4 , 3 or 5)
- 10) The area of the rhombus whose diagonals are 12 and $16\text{ cm} = \dots\dots\text{ cm}^2$
(69 , 96 , 56 or 192)
- 11) The length of $\overline{AB} = \dots\dots$ units of length.
- 12) The area of the square of the diagonal length is $10\text{ cm} = \dots\dots\text{ cm}^2$ (25 , 50 , 100 or 400)



13) In the opposite pie chart:

x represents pupils.

(40 + 80 + 120 or 240)



14) The following table represents the marks of 40 pupils in an exam:

Sets	10-	20-	30-	Total
Frequency	10	12	18	40

Then the number of pupils who got 30 marks or more = pupils.

(18 + 44 + 40 or 80)

2 Complete each of the following:

15) 13, 16, 19, (in the same pattern)

16) The symbolic expression for "a number x is multiplied by 5" is

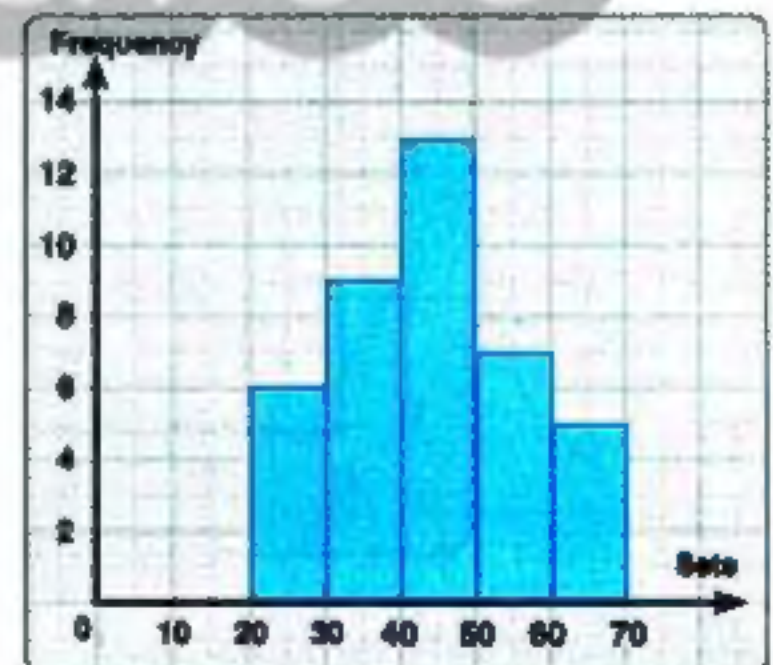
17) The set of natural numbers which are less than 2 is

18) The area of the square whose diagonal length 6 cm = cm^2 .

19) If point A lies on the axis of reflection (L) then its image by reflection across (L) is

20) The radius length of a circle whose circumference is 88 cm = cm.

21) The opposite figure shows the
marks of 40 pupils in one exam,
the number of pupils who got less
than 40 marks is



22) The solution of the equation $x - 2 = 2$ in \mathbb{N} is

3 Find the result of each of the following:

23) Two numbers their sum is 35 if one of them is x , then find the other number.

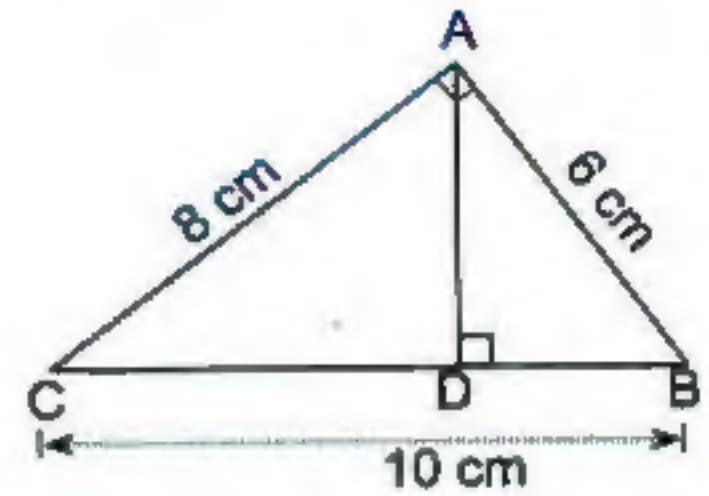
24) By using the properties of addition operation in \mathbb{N} find the result of:

$$53 + 67 + 47$$

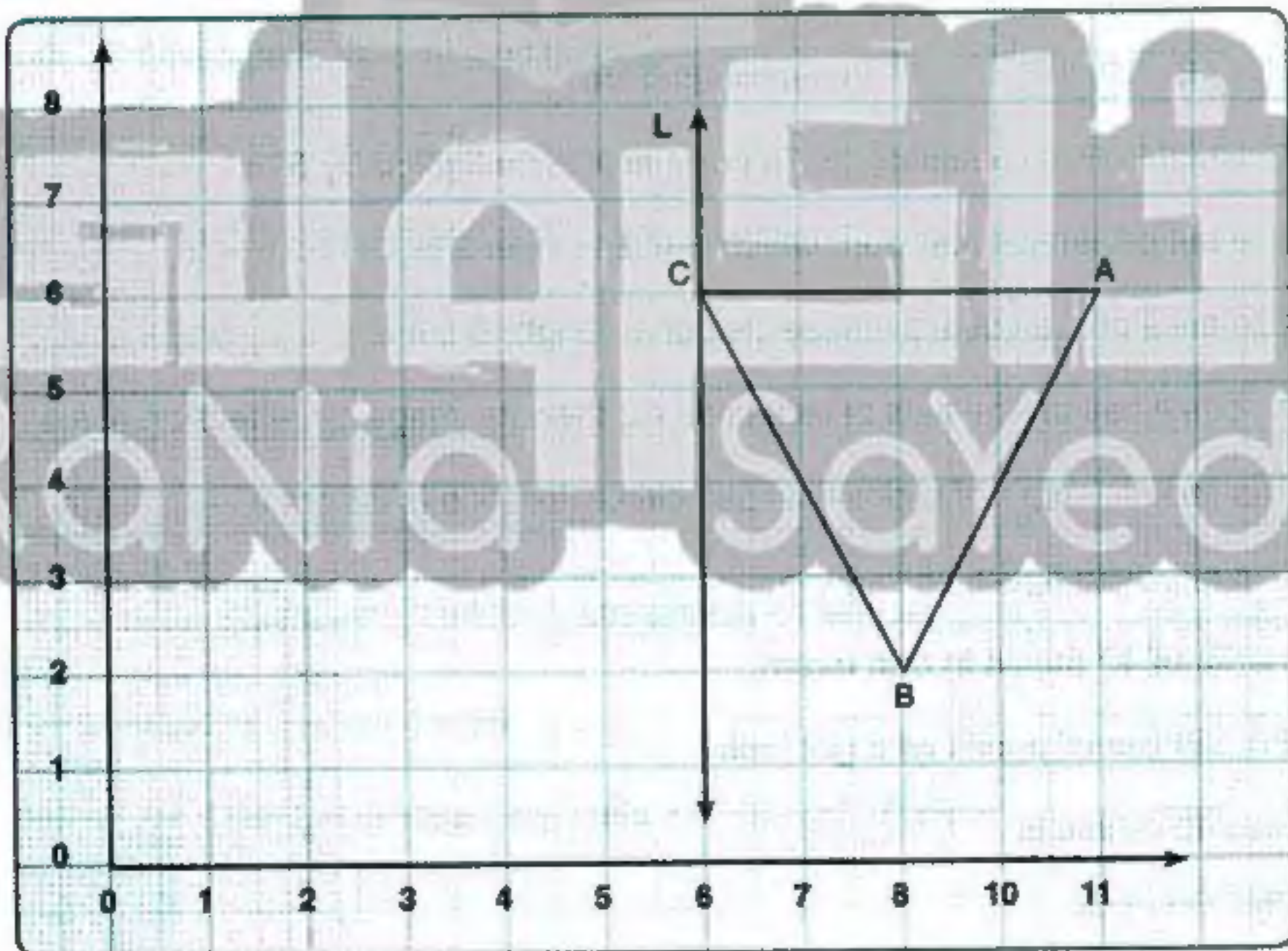
25) In the opposite figure:

ABC is a right-angled triangle at A,

$\overline{AD} \perp \overline{BC}$. Calculate the length of \overline{AD} .



26) In the following coordinates plane, if L is the axis of reflection of $\triangle ABC$ then draw its image by reflection in L .



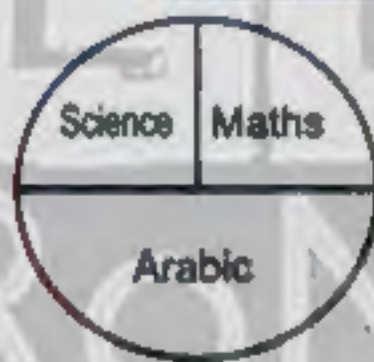
Model Test

2

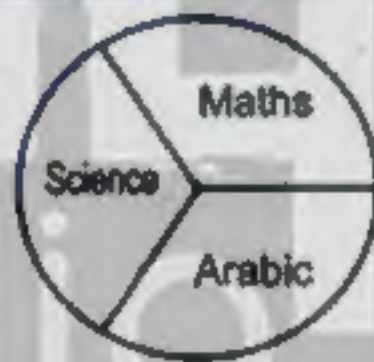
1 Choose the correct answer from those between brackets:

- 1) The symbolic expression for "twice the number y " is ($y + 2$, $2y$, y or $y - 2$)
- 2) The even number $\mathbb{E} \cap$ the odd numbers $\mathbb{O} =$ (0 , 2 , 1 or \emptyset)
- 3) A circle if its diameter length is 28 cm ($\pi \approx \frac{22}{7}$) then its circumference = cm
(22 , 44 , 88 or 56)
- 4) The smallest natural number is (0 , 1 , 2 or 10)
- 5) If $86 \times 15 = 86 \times y + 86 \times 10$ then $y =$ (10 , 5 , 15 or 20)
- 6) $8 + 4$ \mathbb{N} (\in , \notin , \subset or \supset)
- 7) The area of the square whose diagonal length is 8 cm = cm^2 (16 , 32 , 64 or 128)
- 8) The area of the rhombus whose diagonal lengths are 6 cm and 8 cm = cm^2
(12 , 24 , 48 or 96)
- 9) The pie chart which represents the following data is

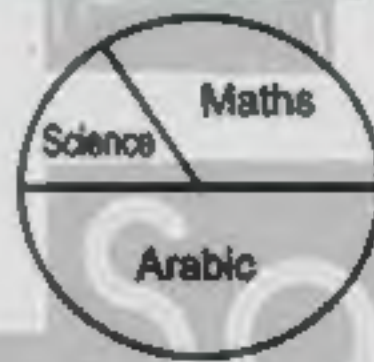
Subject	Arabic	Maths	Science
No. of studying hours	3	2	1



(1)

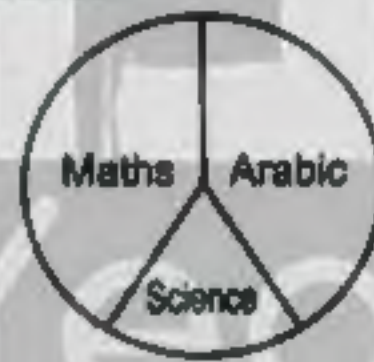


(2)



(3)

or

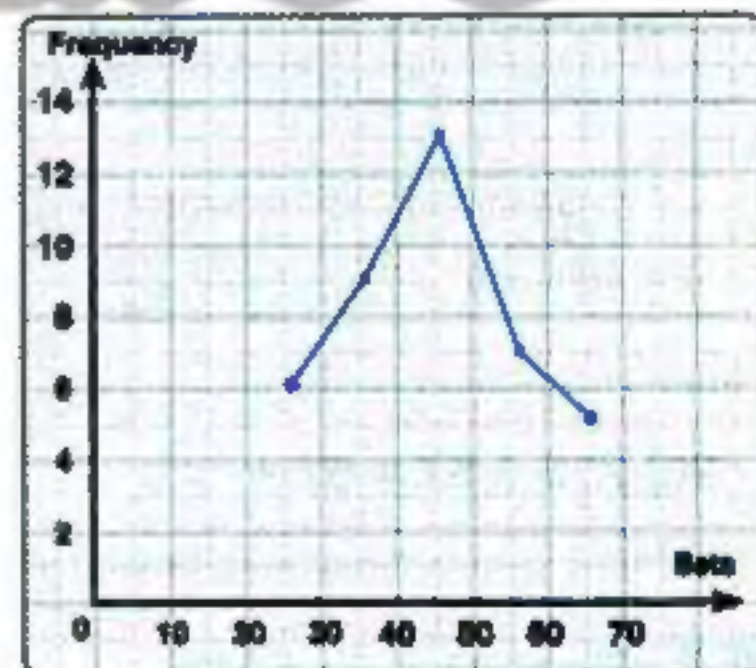


(4)

- 10) The opposite frequency polygon represents the marks of 40 pupils in an exam.

The centre of the set 40 – is

(14 , 40 , 45 or 50)



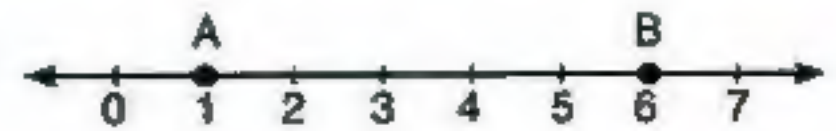
- 11) The area of the triangle whose base length is 12 cm and height is 5 cm = cm^2 .

(30 , 60 , 17 or 34)

Worksheets & Exams

12) From the opposite number line:

The length of \overline{AB} = unit(s) of length.



(1, 5, 6 or 7)

13) The square whose perimeter is 32 cm.

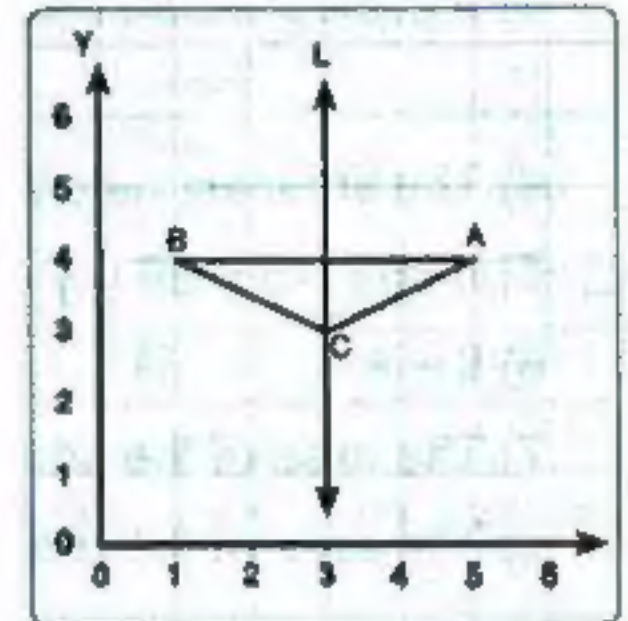
Its area = cm^2 .

(1024, 64, 23 or 821)

14) In the opposite coordinates plane:

The image of point A by reflection in L is

((1, 4), (4, 1), (3, 3) or (4, 51))



2 Complete the following:

15) If x is an odd number, then $x + 1$ is number.

16) In the opposite number line: If m, n are two natural numbers then <

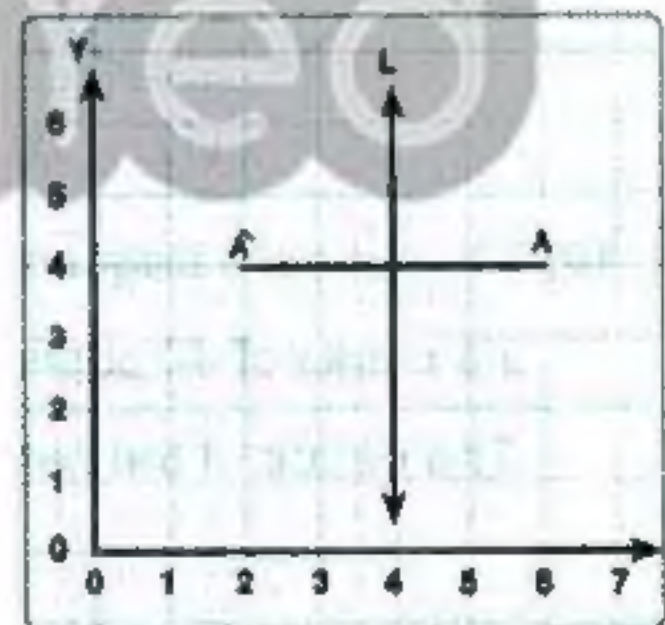


17) If we add 3 to the number x , then the result is

18) The area of a rhombus in which the side length is 10 cm and height is 9.6 cm = cm^2 .

19) In the opposite figure:

L is called of the line segment AA'

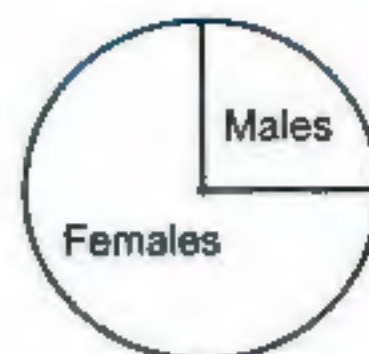


20) $213 + 57 = 57 + \dots$

3 Find the result:

21) If $2x = 4$, then $4x = \dots$

- 22) 200 candidates have applied for a test to hire male and female anchor persons in television. If the opposite pie graph represents that, then what is the number of female candidates who applied for that test?



The number of females =

- 23) Use the distribution property to find:

$$45 \times (10 + 2)$$

- 24) Find the solution set of the equation:

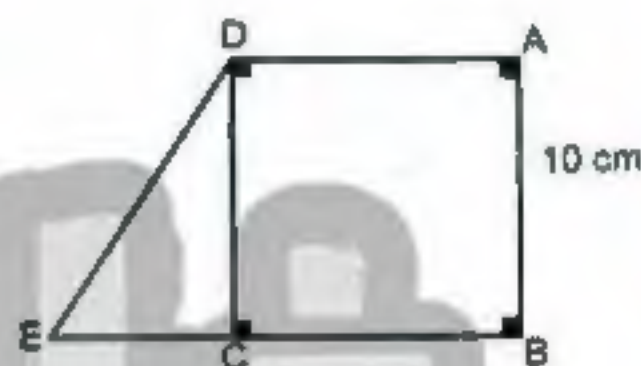
$$x - 7 = 33 \quad (\text{where } x \in \mathbb{N})$$

- 25) in the opposite figure:

ABCD is a square its side length is 10 cm , $E \in \overrightarrow{BC}$

and $BE = 15$ cm.

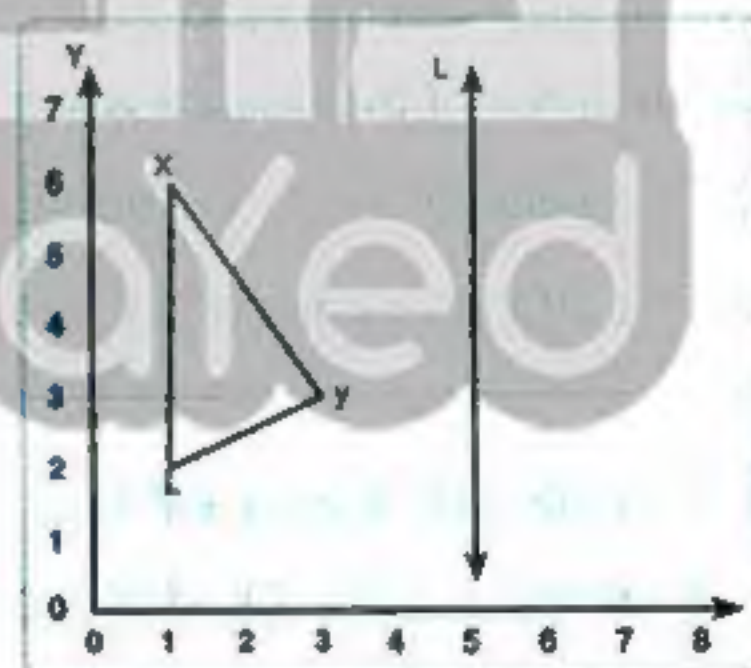
Calculate the area of the figure ABED.



- 26) In the opposite coordinates plane,

if L is the axis of reflection for

the figure XYZ then find its image by reflection in L.




Model

3

for students with special needs

1 Choose the correct answer:

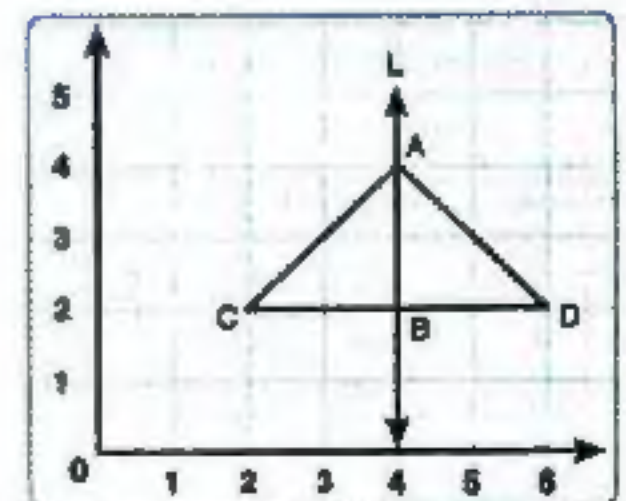
- 1) The smallest natural number is (0, 1 or 2)
- 2) If $7 \times 15 = x \times 15$, then $x = \dots\dots\dots$ (7, 8 or 9)
- 3) If we multiply the number (x) by 5, then we shall get the number ($x \div 5$, $5x$ or $x - 5$)
- 4) The set of numbers which represents the set of points on the number line is
 (odd, even or prime)
- 5) If \mathbb{E} is the set of even numbers, then $\mathbb{E} \dots\dots\dots \mathbb{N}$ (\in , \notin , \subset or \supset)
- 6) The following table shows the recorded temperatures in 40 cities on a day:

Temperatures	20-	22-	24-	26-	28-	Total
Number of cities	7	9	11	8	5	40

- The number of cities with temperatures less than 24 degree Celsius = cities.
 (11, 16 or 27)
- 7) $5075 \dots\dots\dots 5705$ ($>$, $<$ or $=$)
- 8) The area of the square whose diagonal length is 6 cm = cm^2 (12, 18 or 81)
- 9) The solution set of the equation $x - 5 = 19$ ($\{14\}$, $\{24\}$ or $\{5\}$)
- 10) The circumference of a circle of radius 35 cm is cm. ($\pi = \frac{22}{7}$) (110, 220 or 202)

2 Complete each of the following by using the answers between the brackets (24, D, $4x$, \odot , commutative):

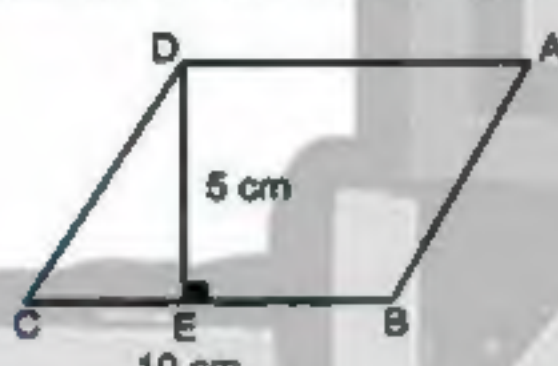
- 1) A rhombus of diagonal lengths 6 cm and 8 cm, its area = cm^2 .
- 2) The perimeter of a square of side length x cm = cm.
- 3) On the opposite coordinate plane the image of the point C by reflection in the straight line L is



4) The set of natural number $\mathbb{N} \cap$ the set of counting number $\mathbb{C} = \dots\dots\dots$

5) $327 \times 8 = 8 \times 327$ (..... property)

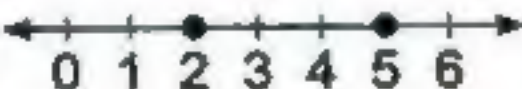
3 Join from column (A) to the suitable from the column (B):

	A	B
1	If $x + 3 = 8$ then $x = \dots\dots\dots$	$\bullet \in$
2	$(24 + 6) \dots\dots\dots \mathbb{N}$	\bullet the length of the diagonal
3	The circumference of a circle $= \pi \times \dots\dots\dots$	$\bullet 5$
4	The area of the following parallelogram  $= \dots\dots\dots \text{cm}^2$	$\bullet 50$
5	8, 16, 24, (in the same pattern)	$\bullet 32$

Examinations from Different Governorates 2018

1 Cairo Governorate – Maadi Educational Directorate

1 Choose the correct answer:

- 1) The expression of: x subtracted from 7 is ($x - 7$ or $7 - x$ or $x + 7$ or $7x$)
- 2) $\frac{8}{4}$ \mathbb{N} . (\in or \notin or \subset or \varnothing)
- 3) The figure F is (reflection or translation or rotation or none of the previous)
- 4) $32 + 0 = 32$ The property is
(commutative or associative or distribution or additive identity)
- 5) $\{4, 5, 7\} \cap \mathbb{E} = \dots\dots\dots$ ($\{4\}$ or $\{5\}$ or $\{7\}$ or $\{5, 7\}$)
- 6) If $x \times 4 = 20$, then $x = \dots\dots\dots$ (80 or 5 or 16 or 24)
- 7) If the radius length of a circle is 3 cm, then the diameter length = cm.
(3 or 6 or 9 or 27)
- 8) If the sum of two numbers x and y is 10, then $y = \dots\dots\dots$
($\frac{10}{x}$ or $10 + x$ or $10 - x$ or $10x$)
- 9) $\frac{7}{4-4}$ \mathbb{N} . (\in or \notin or \subset or \varnothing)
- 10) If a is an odd number, then $a + 3 = \dots\dots\dots$ number. (odd or even)
- 11) $\mathbb{E} \cap \mathbb{P} = \dots\dots\dots$ ($\{2\}$ or $\{3\}$ or \mathbb{E} or \mathbb{P})
- 12) $\mathbb{N} = \{0, 1, 2, 3, 4\}$ (right or wrong)
- 13) $3 \text{ dm}^2 = \dots\dots\dots \text{ cm}^2$. (30 or 3000 or 3 or 300)
- 14)  , $AB = \dots\dots\dots$ units. (2 or 3 or 4 or 5)

2 Complete the following:

- 15) The number of axes of symmetry of the equilateral triangle =
- 16) The area of a square of a diagonal length 6 cm is
- 17) The multiplicative identity element in \mathbb{N} is
- 18) 3, 6, 12, 24, (in the same pattern)

- 19) Area of parallelogram = \times
- 20) If $X = \{4, 5, 6\}$, $Y = \{4, 2, 3\}$, then $X \cup Y =$
- 21) The set of even number less than 10 is
- 22) Area of a rhombus = \times \times

- 3 a) Solve the equation: $3x + 8 = 14$
- b) Find the area of a triangle whose base length is 6 cm and its height is 4 cm.

- 4 A circle whose radius length is 21 cm, find its circumference. ($\pi = \frac{22}{7}$)


- 5 a) Use the distributive property to find the value: $25 \times 8 + 25 \times 2$
- b) Represent the following data frequency polygon:

Sets	10–	20–	30–	40–	Total
Frequency	8	10	16	6	40



2 : Cairo Governorate - Nasr City Educational Zone - Alsun Modern School

1 Choose the correct answer:

- 1) $53 \times 16 = 16 \times \dots\dots\dots$ (35 or 61 or 53 or 16)
- 2) The set of natural numbers that are less than 5 is $\dots\dots\dots$.
($\{0, 1, 2, 3, 4\}$ or \emptyset or $\{5\}$ or $\{1, 2\}$)
- 3) If $a \in \mathbb{N}$, $b \in \mathbb{N}$, then $a \times b \dots\dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 4) $\{2, 3\} \cap \{1, 4\} = \dots\dots\dots$ (\emptyset or $\{1, 2, 3\}$ or $\{2, 3\}$ or $\{3, 4\}$)
- 5) $2y = 10$, then the value of y is $\dots\dots\dots$ (5 or 6 or 8 or 14)
- 6) The area of the triangle whose base length is 5 cm and height is 8 cm = $\dots\dots\dots$ cm².
(20 or 40 or 30 or 15)
- 7) The isosceles triangle has $\dots\dots$ line(s) of symmetry. (1 or 2 or 3 or 4)
- 8) The shaded triangle is the image of the other triangle by a $\dots\dots\dots$.
(perimeter or area or translation or rotation) 
- 9) If $A(5, 6)$, then the first coordinate = $\dots\dots\dots$ (1 or 6 or 11 or 5)
- 10) $213 + 57 = 57 + 213$ is called $\dots\dots\dots$ property.
(commutative or associative or closure or additive identity)
- 11) The area of square with side length 10 cm = $\dots\dots\dots$ cm². (200 or 30 or 100 or 400)
- 12) The circumference of a circle with diameter 7 cm, = $\dots\dots\dots$ cm. ($\pi = \frac{22}{7}$)
(22 or 11 or 8 or 7)
- 13) The height of a parallelogram with base length = 6 cm and area = 30 cm² = $\dots\dots\dots$ cm.
(3 or 4 or 5 or 8)
- 14) The perimeter of the equilateral triangle whose side length = L cm is $\dots\dots\dots$ cm.
($L + 3$ or $\frac{1}{3}L$ or $L - 3$ or $3L$)

2 Complete the following:

- 15) The additive identity in \mathbb{N} is $\dots\dots\dots$ while the multiplicative identity in \mathbb{N} is $\dots\dots\dots$.
- 16) The square has $\dots\dots\dots$ axes of symmetry.
- 17) 2, 7, 12, 17, $\dots\dots\dots$ (in the same pattern)

18) If the area of rhombus is 50 cm^2 and the length of one of its diagonal is 25 c, then the length of the other diagonal = cm.

19) $E \cup O =$

20) $x + 5 = 8$, then $x =$

21) $15 \times 5 + 15 \times 7 = 15 \times (\dots + \dots)$

22) If the age of Dina now is x years, then:

a) The age of Dina after 7 years =

b) The age of Dina 5 years ago =

3 Find the result of:

23) Use the properties of the operation to find:

a) $4 \times 19 \times 25$

b) $64 + 81 + 36 + 19$

24) Solve the equation: $x - 5 = 2$

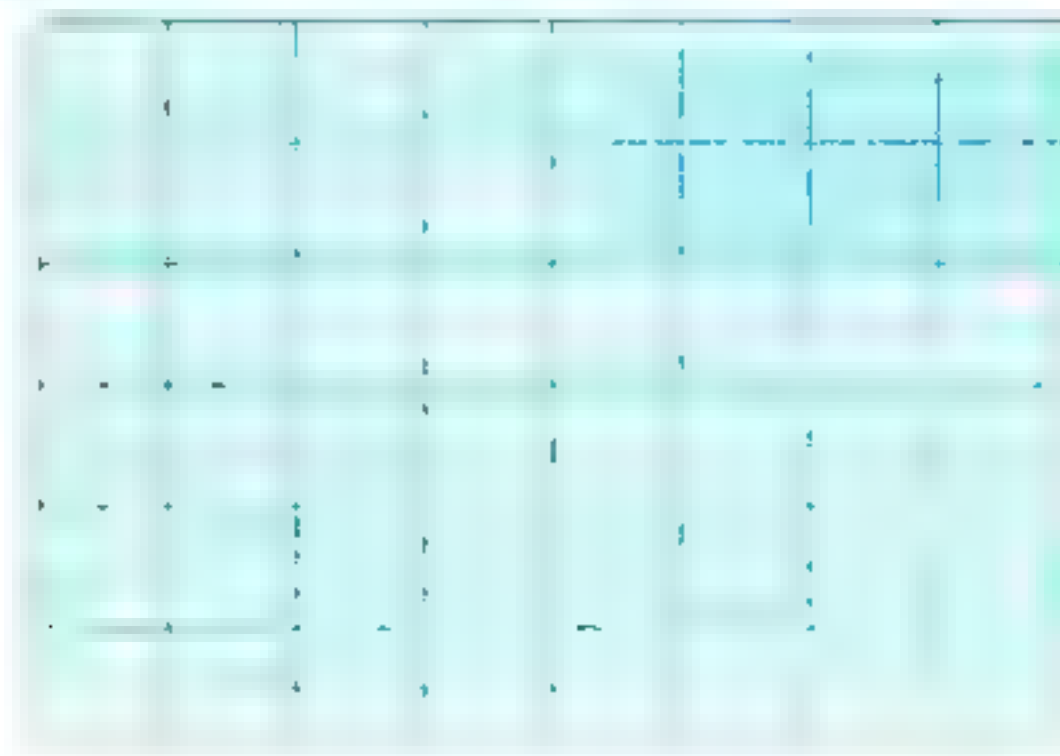
25) Draw the triangle ABC in which $A = (2, 5)$, $B = (5, 5)$, $C = (5, 2)$, then find the length of \overline{AB} .

26) If $X = \{1, 2, 3, 4\}$ and $Y = \{4, 5, 6\}$. Find. $X \cap Y$, $X \cup Y$, $X - Y$

4 The following table shows the marks of students in maths exam:

Sets	10-	20-	30-	40-
Frequency	7	12	10	9

Represent these data by the frequency polygon.



3

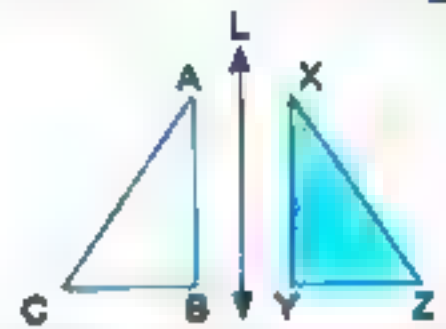
Cairo Governorate - Abdeen Zone - Mohamed Farid O.L.S.

1 Choose the correct answer:

- 1) $(12 + 3) \dots \dots \dots \mathbb{N}$. (\in or \notin or \subset or \supset)
 2) The smallest even natural number is (4 or 2 or 1 or 0)
 3) $27 \times 100 = 27 \times 65 + 27 \times a$, then $a =$ (100 or 65 or 35 or 30)
 4) If $x - 2 = 3$, $x \in \mathbb{N}$ then $x =$ (3 or 4 or 5 or 6)
 5) The symbolic expression for the double of the number y is $\dots \dots \dots$ ($y + 2$ or $2y$ or $y - 2$ or $\frac{y}{2}$)

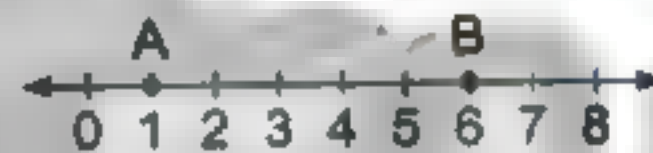
6) In the opposite figure:

$\triangle ABC$ is transformed into $\triangle XYZ$, then this transformation is $\dots \dots \dots$



(reflection or translation or rotation)

7) In the opposite figure:

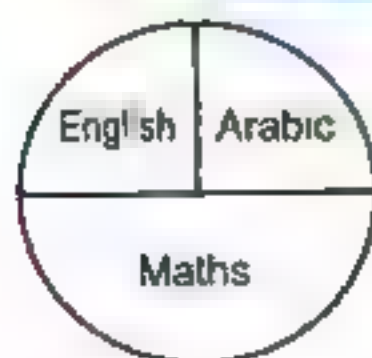
The length of $AB = \dots \dots \dots$ length units.

(3 or 4 or 5 or 6)

- 8) The sum of two numbers is 10, one of them is x , then the other number is $\dots \dots \dots$ ($10x$ or $x - 10$ or $10 - x$ or $x + 10$)
 9) If the base length of a triangle is 6 cm, the corresponding height is 5 cm, then its area = $\dots \dots \dots$ cm^2 . (30 or 15 or 10 or 6)
 10) The circumference of a circle of radius 4 cm = $\dots \dots \dots \times \pi$ (2 or 4 or 8 or 16)
 11) The area of the rhombus whose diagonal lengths are 6 cm and 10 cm = $\dots \dots \dots$ cm^2 . (12 or 15 or 30 or 60)
 12) The area of the square whose diagonal lengths are 6 cm and 10 cm = $\dots \dots \dots$ cm^2 . (36 or 24 or 18 or 12)

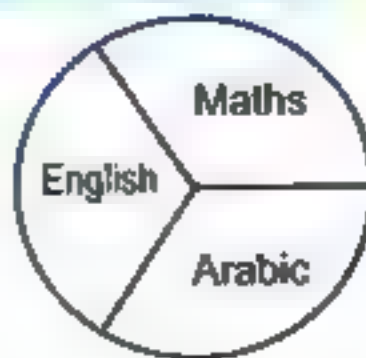
13) The circular sector which represents the following data is number $\dots \dots \dots$

Subject	Maths	English	Arabic
No. of studying hours	3	2	1



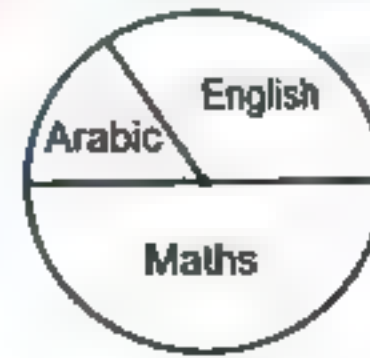
(1)

or



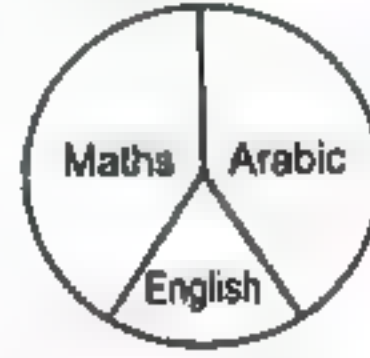
(2)

or



(3)

or



(4)

14) The following table shows the marks of 40 pupils in one test.

Sets	10–	20–	30–	Sum
Frequency	12	10	18	40

The number of pupils who got 20 marks or more = . pupils. (10 or 18 or 28 or 40)

2 Complete the following:

15) The set of even number $\mathbb{E} \cap$ the set of odd number $\mathbb{O} =$

16) The additive identity element in is \mathbb{N}

17) If $x + 3 = 5$, $x \in \mathbb{N}$, then $x =$..

18) The set of nature number(s) less than 2 = .

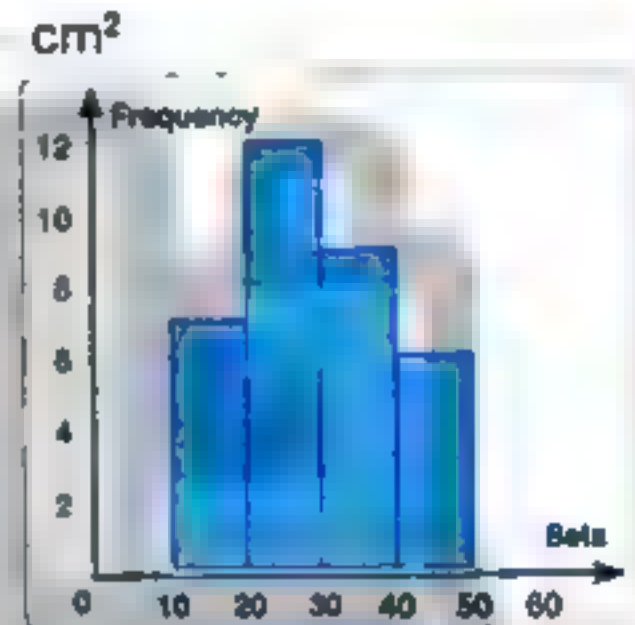
19) The number of symmetry axes of square = ..

20) If the point A lies on the axis of reflection L, then its image by reflection in L is

21) The area of the square whose perimeter is 16 cm =

22) The opposite figure shows the marks of 34 pupils in one test.

The number of pupils who got less than 30 marks = ... pupils.



23) Use the properties of addition in \mathbb{N} to find the result $33 + 76 + 67$

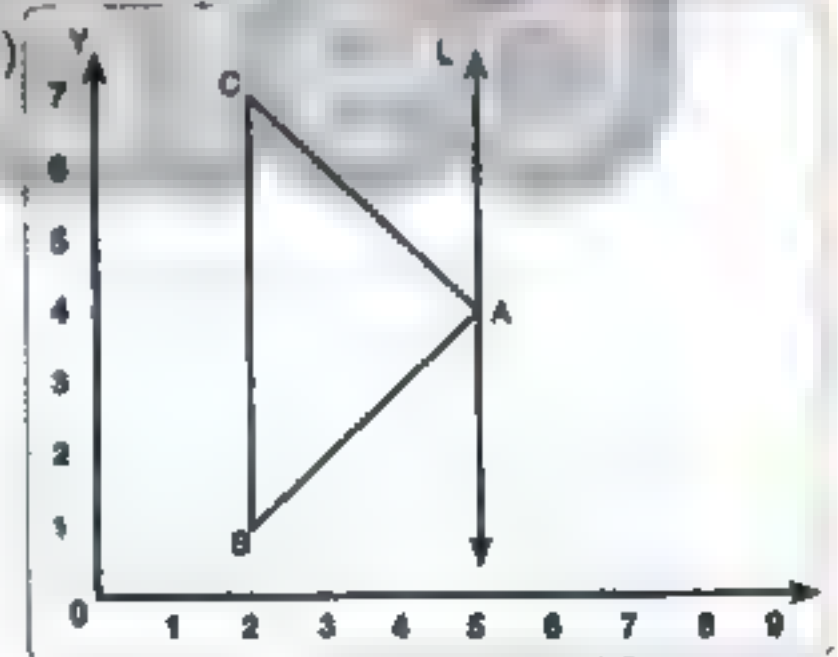
24) If $X = \{x : x \in \mathbb{N}, x \geq 3\}$, then $X =$

(Then represent its elements on the number line)



25) In the opposite figure:

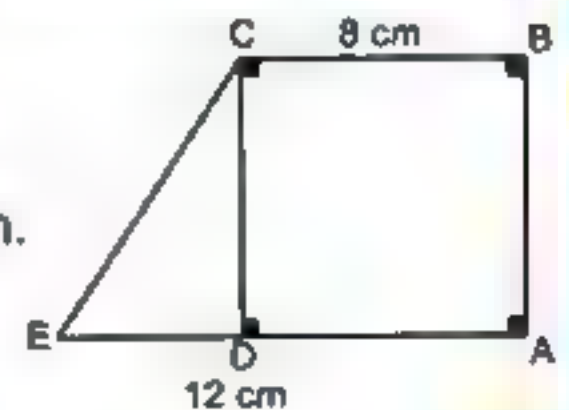
Draw the image of $\triangle ABC$ by reflection in the straight line L



26) In the opposite figure:

ABCD is a square of side length is 8 cm, $E \in \overrightarrow{AD}$, $AE = 12$ cm.


Find the area of the shape ABCE.



4

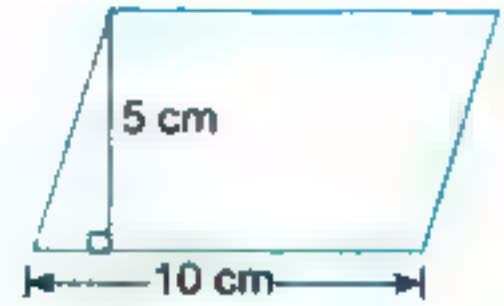
Giza Governorate El Haram Directorate Fadl Language School

1. Choose the correct answer:

- 1) If we add 3 to the number x , we get (3 x or $x + 3$ or $2x$ or $2x + 3$)
- 2) The circumference of a circle of a radius 4 cm = cm. (4π or 8π or 10π or 16π)
- 3) The area of the square whose diagonal is 6 cm = cm^2 . (24 or 36 or 6 or 18)
- 4) $\frac{3}{2-2}$ N. (\in or \notin or \subset or $\not\subset$)
- 5) A rhombus of diagonal lengths 6 cm and 8 cm, its area = cm^2 . (24 or 48 or 14 or 6)
- 6) The perimeter of the equilateral triangle whose side length is L = (L + 3 or $3L$ or $L + 6$ or 4)
- 7) In the opposite figure: $\triangle XYZ$ is transformed to $\triangle X'Y'Z'$ by
(reflection or translation or rotation or otherwise)
- 8) If the area of a triangle is 20 cm^2 and its base length is 8 cm, then its height = cm^2 . (80 or 40 or 20 or 5)
- 9) $213 + 87 = 87 + 213$. (..... property)
(associative or commutative or closure or otherwise)
- 10) In the opposite figure: 
M and N are natural numbers, then ($M < N$ or $M > N$ or $M = N$ or otherwise)
- 11) The smallest natural number is (0 or 1 or 2 or 3)
- 12) The representation of these data is called
(histogram or frequency or bar graphs or otherwise)
- 13) The set of even number (\mathbb{E}) \cap the set of odd number (\mathbb{O}) = (\mathbb{E} or \mathbb{O} or \emptyset or \mathbb{N})
- 14) If the circumference of a circle = 44 cm, $\pi = \frac{22}{7}$, then its radius = cm. (7 or 14 or 21 or 28)

2 Complete:

- 15) If $x + 5 = 7$, then $x =$
- 16) The area of the opposite figure = cm^2 .
- 17) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$
- 18) Number of axes of symmetry of the square is
- 19) If a point B lies on the axis of reflection L, then its image by reflection in L is
- 20) The following table recorded the temperature in 40 cities on a day:

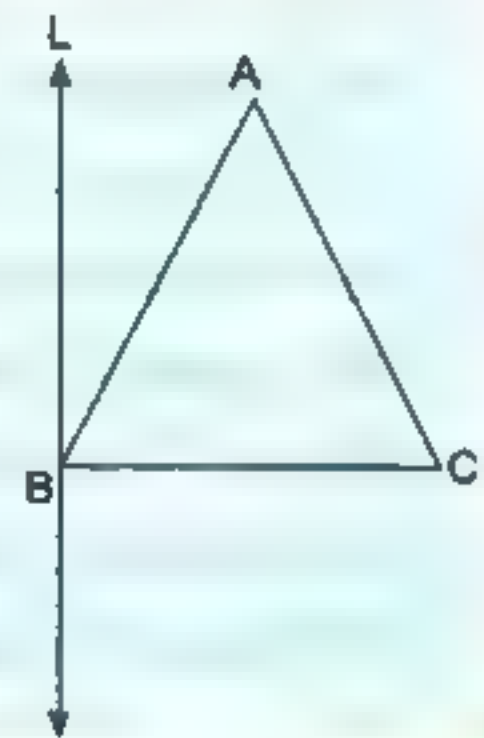


Temp.	20–	22–	24–	26–	28–	Total
No. of cities	7	9	11	8	5	40

- The number of cities with temperatures less than 24 degrees Celsius is cities.
- 21) If x is an odd number, then $(x + 2)$ is a/ an number.
- 22) 5, 10, 15, (in the same pattern)

3 Answer the following questions:

- 23) By using the properties of the operations in N ,
Find the result of: $8 \times 117 \times 125$.
- 24) Solve the equation in N :
 $2x - 3 = 5$
- 25) A circle of diameter 14 cm, find its circumference. ($\pi = \frac{22}{7}$)
- 26) If L is the axis of reflection, draw the image
of $\triangle ABC$ by reflection in L.



5

Giza Governorate Maths Supervision

1 Choose the correct answer:

- 1) The circumference of a circle =
(πr or $2\pi r$ or $3\pi r$ or $4\pi r$)
- 2) Add 3 to the number Y is
(Y or $Y + 3$ or $Y - 3$ or $Y + 3$)
- 3) $2 + 5 \dots \dots N$.
(\in or \notin or \subset or \varnothing)
- 4) The square has line(s) of symmetry.
(4 or 1 or 2 or 3)
- 5) 4, 7, 10, 13, (In the same pattern)
(15 or 14 or 16 or 19)
- 6) If $4x = 20$, then $x = \dots\dots\dots$.
(4 or 5 or 10 or 16)
- 7) The area of a square of side length is 6 cm = cm^2 .
(24 or 36 or 12 or 72)
- 8) If $x + 2 = 8$, then $x = \dots\dots\dots$.
(6 or 10 or 4 or 16)
- 9) $17 \dots \dots N$.
(\in or \notin or \subset or \varnothing)
- 10) $N - \emptyset = \dots\dots\dots$.
(\mathbb{N} or $\{2\}$ or \mathbb{E} or \emptyset)
- 11) The area of a triangle of base length is 8 cm and height is 5 cm = cm^2 .
(20 or 40 or 10 or 46)
- 12) The area of a parallelogram of base length is 7 cm and height is 4 cm = cm^2 .
(11 or 28 or 22 or 56)
- 13) The area of the rhombus whose diagonal lengths are 6 cm and 8 cm = cm^2 .
(7 or 14 or 24 or 48)
- 14) The smallest natural number is
(0 or 1 or 2 or 3)

2 Complete:

- 15) The area of the rhombus = half the product of
- 16) If x is an odd number, then $x + 1$ is an number.
- 17) The area of a triangle = $\frac{1}{2} \times \dots\dots\dots \times \dots\dots\dots$
- 18) $75 + 89 = 89 + \dots\dots\dots$
- 19) The set of natural numbers less than 5 are
- 20) If $(a, 9) = (4, b)$, then $a = \dots\dots\dots$ and $b = \dots\dots\dots$
- 21) The area of a square of diagonal length is 8 cm = cm^2 .
- 22) The next number in the pattern: 1, 3, 9, 27,

3 Answer the following questions:

23) Solve the equation: $x + 7 = 15$ 24) Use the properties of addition to find: $20 + 55 + 80 + 45$ 25) Find the circumference of a circle with radius length 14 cm. (Where $\pi = \frac{22}{7}$)


26) Use the following table to draw a histogram:

Sets	10–	20–	30–	40–
Frequency	4	5	6	5

6

Alex Governorate - El Montazah Zone Maths Supervision

1 Choose the correct answer:

- 1) If the sum of two numbers is 21 and one of them is x . Then the other number is
($x - 21$ or $21 - x$ or $x + 21$)
- 2) The area of the square whose diagonal length is 10 cm = cm^2 . (100 or 20 or 50)
- 3) The number of axes of symmetry of rhombus is (zero or 1 or 2 or 4)
- 4) If $2x + 7 = 15$, then $x =$ (3 or 4 or 6 or 5)
- 5) If x is an odd number, then $x + 1$ is an number. (even or odd or otherwise)
- 6) $(4 \times 31) \times 25 = (31 \times \quad) \times 25$ (4 or 2 or 3 or 5)
- 7) The circumference of circle of radius 5 cm = $\pi \times$ cm. (4 or 5 or 10 or 25)
- 8) Twice the number y subtracted 3 from it = ($2y$ or 3 or $2y - 3$ or $3 - 2y$)
- 9) If $4 \times 35 = (x \times 5) + (x \times 30)$, then $x =$ (30 or 5 or 14 or 4)
- 10) The circle whose radius is 7 cm, its circumference = cm. ($\pi = \frac{22}{7}$)
(3.5 or 7 or 22 or 44)
- 11) The length of the base of the triangle whose area is 120 cm^2 and its height is 5 cm = cm. (12 or 48 or 24 or 6)
- 12) The table shows the marks of 40 pupils in mathematics exam, from these data. How many pupils got 30 marks and more? (12 or 28 or 16 or 21)
- | | | | | | |
|-----------|-----|-----|-----|-----|-----|
| Sets | 10- | 20- | 30- | 40- | 50- |
| Frequency | 5 | 7 | 12 | 9 | 7 |
- 13) The geometric transformation in the opposite figures is: 
(translation or rotation or reflection)
- 14) The centre of the set that starts by 10 and ends at 20 is
(30 or 15 or 200 or 25)

2 Complete the following:

- 15) If the longest chord of circle is 10 cm, then its circumference = cm.
- 16) The additive neutral element in \mathbb{N} is
- 17) If $(2x, 3) = (8, 3)$, then $x =$

- 18) If the diagonal length of a square is 6 cm, then its area = cm^2 .
- 19) The scalene triangle has line(s) of symmetry.
- 20) If we add 5 to number y, then we get the number
- 21) The area of rhombus with diagonal lengths 8 cm and 6 cm = cm^2 .
- 22) The natural numbers less than 3 are

- 23) Use the commutative and associative property to find the result

$$4 \times 17 \times 25$$

- 24) Solve the following equation:

$$3x - 5 = 10$$

(show the steps) (where $x \in \mathbb{N}$)

- 25) In the coordinate plane:


a) Draw figure ABC where A (3 , 5) , B (6 , 5) , C (3 , 2)

B) Draw the image of $\triangle ABC$ by reflection in AC.


7

Alex Governorate – El Montazah Zone – Maaly Language School

1 Choose the correct answer:

- 1) The sum of 7 and twice the number $x = \dots$ ($x - 7$ or $7 - 2x$ or $2x + 7$ or $7 - x$)
- 2) The smallest natural number is \dots (0 or 2 or 1)
- 3) If $213 + 87 = 87 + 213$ is called \dots property. (commutative or asociative or closure)
- 4) The set of even numbers $\mathbb{E} \cap$ the set of odd numbers $\mathbb{O} = \dots$ (\mathbb{N} or \mathbb{E} or \mathbb{O} or \emptyset)
- 5) The area of a square with side length 5 cm $= \dots$ (20 cm or 20 cm^2 or 25 cm or 25 cm^2)
- 6) x, y are two numbers, their sum is 20, then $x = \dots$ ($20 + y$ or $y - 20$ or $20 - y$)
- 7) $7 - 5 \dots \mathbb{N}$. (\in or \notin or \subset or $\not\subset$)
- 8) The perimeter of equilateral Δ with side length $(L) = \dots$ ($L + 3$ or $3L$ or $6 + L$ or $6L$)
- 9) $\{0\} \dots$ the set of counting numbers. (\in or \notin or \subset or $\not\subset$)
- 10) If the lengths of the two right sides in the right-angled triangle are 6 cm and 8 cm, then its area $= \dots \text{ cm}^2$. (48 or 24 or 28)
- 11) The circle with radius 15 cm, then its circumference $= \dots \pi$. (15 or 25 or 30 or 45)
- 12) The number of the axes of symmetry of the square is \dots (2 or zero or 1 or 4)
- 13) The geometric transformation is called \dots  (translation or relation or reflection)
- 14) The set of natural numbers less than 2 is \dots ($\{0, 1\}$ or $\{0\}$ or $\{0, 1, 2\}$ or $\{1, 2\}$)

2 Complete the following:

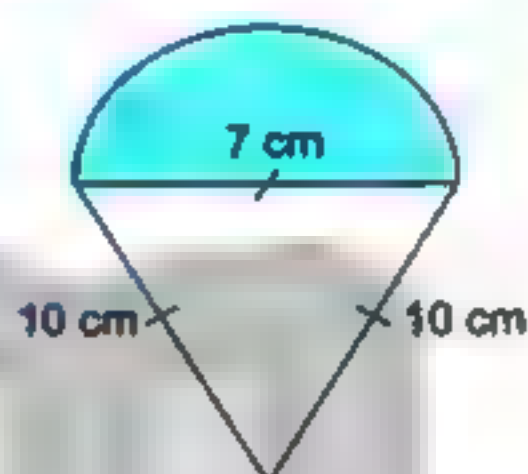
- 15) The area of a rhombus whose diagonals are 6 cm and 8 cm $= \dots \text{ cm}^2$.
- 16) The circle with diameter length 14 cm, then its circumference $= \dots$.
- 17) If x is an odd number, then $(x + 1)$ is \dots number.
- 18) Circumference of circle + diameter $= \dots$.
- 19) From the opposite figure  \dots
- 20) The area of the parallelogram whose base length is 10 cm and its corresponding height is 9.6 cm, then its area $= \dots$.
- 21) The additive neutral element added to 99 $= \dots$.
- 22) 20, 17, 14, 11, \dots (Complete in the same pattern.)

- 3 23) Draw ΔABC if $A(2, 2)$, $B(6, 5)$, $C(6, 9)$ and find its image by reflection on \overleftrightarrow{BC} .

- 24) Find the S.S in \mathbb{N} : $2x + 9 = 21$

- 25) Find the perimeter of the following figure:

$$\pi \approx \frac{22}{7}$$



- 4 Represent the following data by histogram:

Sets	10–	20–	30–	40–	Sum
Frequency	10	12	18	10	50

8

Qalubia Governorate Maths Supervision Experimental Official Schools

1 Choose the correct answer:

- 1) The smallest natural number is (zero or 1 or 2 or 10)
 2) $(8 + 4) \dots\dots\dots N$, (E or F or C or D)
 3) The area of square whose diagonal length 6 cm = cm². (12 or 18 or 81 or 36)

- 4) The area of the rectangle

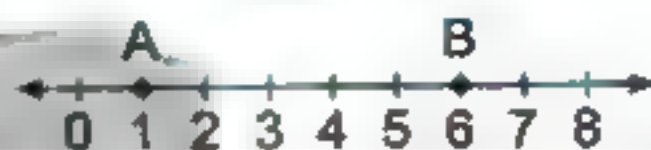
ABCD = cm².



(5 or 13 or 18 or 36)

- 5) In the opposite figure:

The length of \overline{AB} = length units.



(1 or 5 or 6 or 7)

- 6) The circumference of the circle whose diameter length is 8 cm = $\pi \times \dots\dots\dots$ cm.

(4 or 8 or 16 or 10)

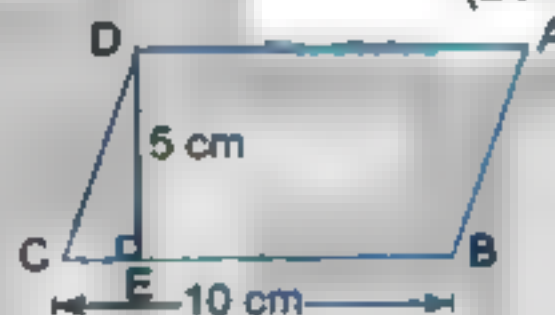
- 7) $(93 + 7) - (7 + 93) = \dots\dots\dots$

(zero or 10 or 100 or 1000)

- 8) In the opposite figure:

The area of the parallelogram

ABCD = cm².



(50 or 30 or 25 or 15)

- 9) If we add 3 to the number x, we get (3x or 3 + x or 2x + 3 or 2x)

- 10) The area of a rhombus with diagonal lengths 6 cm and 8 cm = cm².

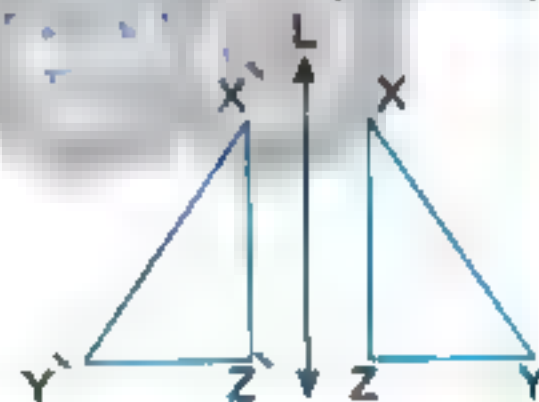
(24 or 14 or 34 or 44)

- 11) $5 + \text{zero} = \dots\dots\dots$

(zero or 1 or 5 or is not possible)

- 12) In the opposite figure:

$\triangle XYZ$ is transformed to $\triangle X'Y'Z'$, then this transformation is called



(reflection or translation or rotation or otherwise)

- 13) The following table shows the recorded temperatures in 40 cities in a day.

Temp.	20-	22-	24-	26-	28-	Total
No. of cities	7	9	11	8	5	40

- a) The number of cities with temperatures less than 24 degrees celsius cities.

(11 or 16 or 27 or 35)

- b) The number of cities with temperatures 26 degrees or more is

(8 or 5 or 13 or 34)

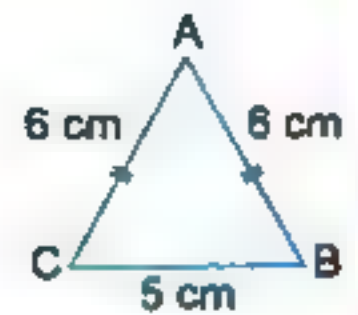
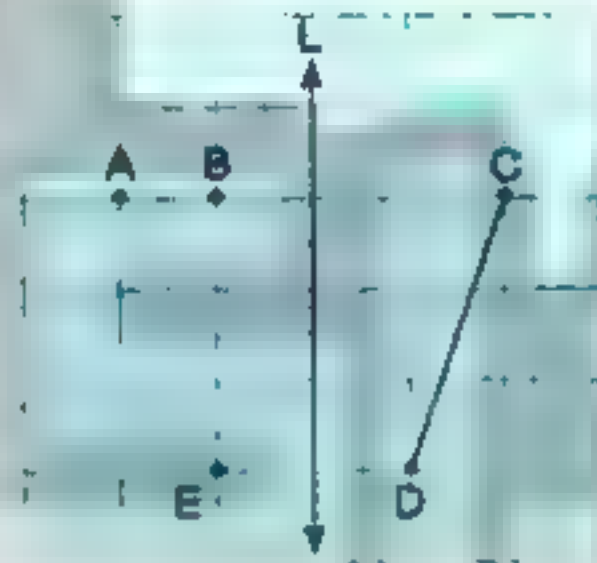
2 Complete the following:14) $a + \text{zero} = \text{zero} + \dots$

15) Complete in the same pattern:

2, 4, 8, \dots , \dots

16) In the opposite figure:

The perimeter of $\triangle ABC = \dots + \dots + \dots$
 $= \dots \text{ cm.}$

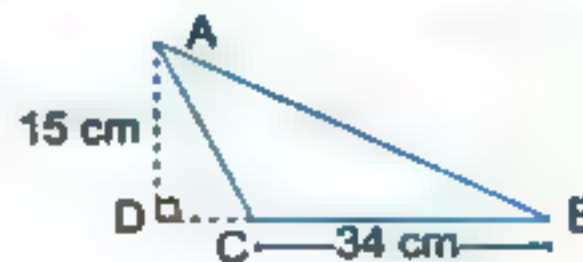
17) If $9 \times 13 = 13 \times y$, then $y = \dots$ 18) The diagonals of a square are \dots and \dots 19) The coloured sector in the figure represents \dots of the circle.20) The number of symmetry axes of an equilateral triangle = \dots 21) The image of the line \overline{CD} by reflection across L is \dots **3 22) Use the distributive property to find:**

$$45 \times (10 + 2) = \dots$$

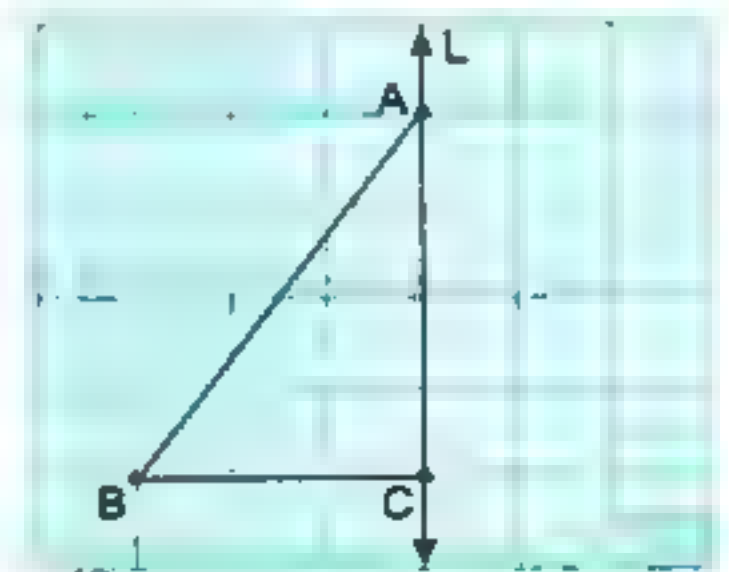
23) Solve the following equation:

$$x + 3 = 12, \text{ where } (x \in \mathbb{N}).$$

24) In the opposite figure:

Find the area of $\triangle ABC$.

25) In the opposite figure:



Draw the image of $\triangle ABC$ by reflection across (L) .

9 Gharbia Governorate - Gharbia Educational Directorate - Maths Supervision .

1 Choose the correct answer:

- 1) $E \cap P = \dots\dots\dots$, $(\{0\} \text{ or } \{1\} \text{ or } \{2\} \text{ or } \{2, 3\})$
- 2) The number of lines of symmetry of square is $\dots\dots\dots$ (4 or 3 or 2 or 1)
- 3) The radius length of the circle whose circumference is 88 cm = $\dots\dots\dots$ cm. ($\pi = \frac{22}{7}$)
(7 or 14 or 21 or 28)
- 4) The perimeter of the equilateral triangle whose length is x cm = $\dots\dots\dots$ cm.
($x + 4$ or $x + 4$ or $3x$ or $x - 4$)
- 5) The opposite table shows the marks of 21 pupils, then the number of pupils get less, than 30 is $\dots\dots\dots$.
- | Sets | 10- | 20- | 30- |
|-----------|-----|-----|-----|
| Frequency | 5 | 7 | 9 |
- (5 or 12 or 9 or 12)
- 6) $\{0\} \dots\dots\dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 7) If the area of the parallelogram is 20 cm^2 and its base length is 5 cm, then the corresponding height = $\dots\dots\dots$ cm. (4 or 5 or 8 or 10)
- 8) The area of the square whose perimeter is 32 cm = $\dots\dots\dots$ cm^2 . (64 or 32 or 16 or 8)
- 9) If x is an odd number, then $x + 1$ is a/an $\dots\dots\dots$ number. (odd or even or prime)
- 10) The type of the opposite transformation is a $\dots\dots\dots$ $\Rightarrow \Rightarrow$
(translation or reflection or rotation)
- 11) The multiplicative neutral element is $\dots\dots\dots$. (0 or 1 or 10 or 100)
- 12) The area of the triangle whose base length is 5 cm and height is 8 cm = $\dots\dots\dots$ cm^2 .
(40 or 13 or 20 or 10)
- 13) The circumference of the circle whose diameter is 14 cm = $\dots\dots\dots$ cm. ($\pi = \frac{22}{7}$)
(11 or 44 or 88 or 22)
- 14) In a rectangle the diagonal divides it into two $\dots\dots\dots$ triangles.
(isosceles or congruent or equilateral)

2 Complete the following:

- 15) $(5 \times 52) \times 17 = (52 \times \dots\dots\dots) \times 5$
- 16) The type of the opposite transformation is $\dots\dots\dots$.  
- 17) The set of natural numbers less than 3 is $\dots\dots\dots$.

- 18) The area of the rhombus whose side length is 10 cm and corresponding height 9.6 cm is cm^2 .
- 19) The number of line of symmetry of a rectangle is
- 20) 13 , 16 , 19 (in the same pattern)
- 21) If we add 3 to double of number x we get
- 22) If the number of pupils in a class is 40 pupils by using opposite pie chart, the number of girls is



- 3 23) a) Use the properties to find:

$$8 \times 117 \times 125$$

- b) Solve an equation:

$$2x + 9 = 21$$

- 24) Which is greater in area?

- a) A rhombus in which the length of its diagonals are 8 cm and 6 cm or a square whose diagonal length is 8 cm.
- b) In the coordinate plane draw the figure ABCD where
A (2 , 5) , B (2 , 2) , C (5 , 2) , D (5 , 5)

10

Dakahlia Governorate Maths Supervision

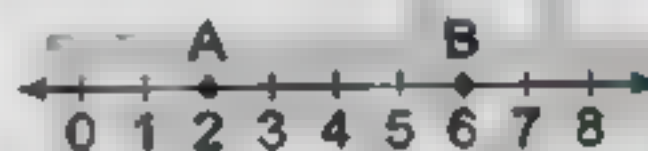
1 Complete each of the following:

- 1) The set of natural numbers less than 4 is
- 2) The multiplicative neutral element in \mathbb{N} is
- 3) If $8 \times 25 = 25 \times a$, then $a = \dots\dots\dots$
- 4) If the sum of two numbers is 10 and one of them is x , then the other =
- 5) The area of a square whose diagonal length is 6 cm = cm^2 .
- 6) If the point A lies on the axis of reflection L, then its image by reflection in L is
- 7) The number of axes of symmetry of a parallelogram is

2 Choose the correct answer:

- 8) $5 - 7 \dots\dots \mathbb{N}$ (\in or \notin or \subset or \supset)
- 9) $(x - 15) \dots\dots (x - 14)$ where x is a natural number more than 17. ($>$ or $<$ or \leq or \geq)
- 10) If $35 + (12 + x) = (35 + 12) + 19$, then $x = \dots\dots\dots$ (35 or 12 or 19 or 47)
- 11) 1, 4, 9, 16, (in the same pattern) (23 or 24 or 25 or 36)
- 12) If we add 3 to the number x , we get ($3 + x$ or $3x$ or $2x + 3$ or $2x$)

13) On the number line:

The length of $AB = \dots\dots$ length unit.

(2 or 5 or 4 or 6)

- 14) The radius of a circle whose circumference is 88 cm = cm.

(11 or 13 or 14 or 22)

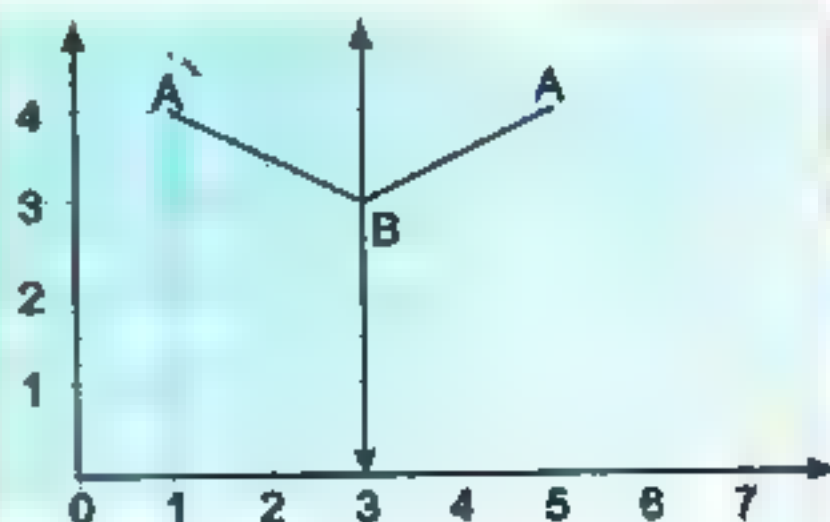
- 15) The perimeter of the opposite figure, where $AM = 35$ cm is = ($\pi = \frac{22}{7}$)



(160 or 180 or 170 or 150)

- 16) On the coordinate plane the image of the point A by reflection in L is

((5, 4) or (3, 3) or (1, 4) or (4, 1))



17) The area of a triangle of base length 12 cm, its height 5 cm = cm².

(60 or 30 or 17 or 34)

18) The area of the square whose perimeter is 32 cm = cm². (128 or 32 or 64 or 1024)

19) A parallelogram, in which, the lengths of two adjacent sides are 5 cm and 7 cm, the length of the smaller height = 4 cm, then its area = cm². (28 or 10 or 20 or 14)

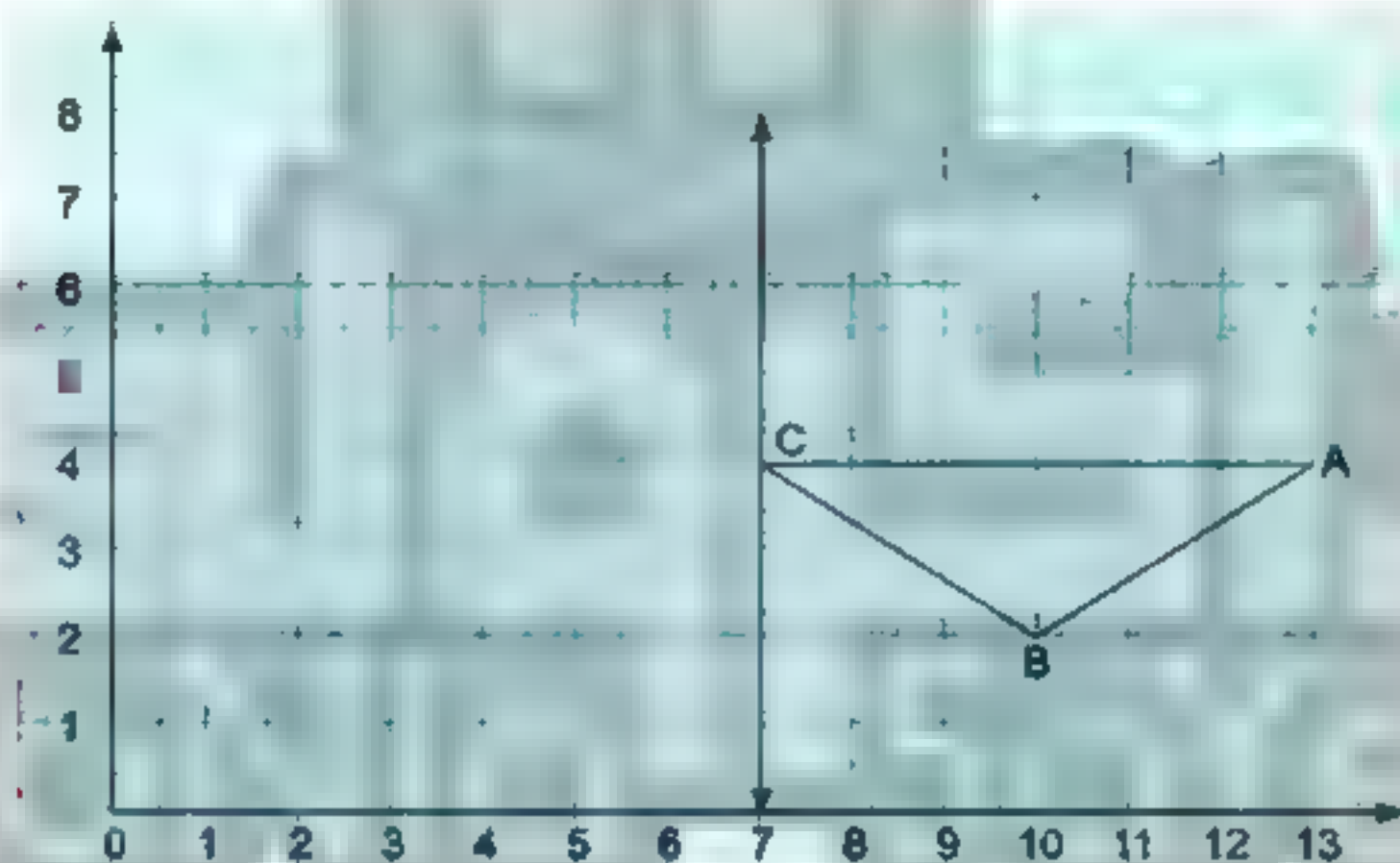
3 a) Use the properties of commutation and association in \mathbb{N} to find the result of.

$$872 + 199 + 128 + 801$$

(Write the used property.)

b) Solve the equation: $3x + 8 = 29$, $x \in \mathbb{N}$

c) On the coordinate plane, if L is the axis of reflection for the triangle ABC, draw the image of $\triangle ABC$ in the straight line L.



d) A rhombus in which the lengths of its diagonals are 12 cm and 16 cm and its height is 9.6 cm. Calculate:

1) The area of the rhombus.

2) Its perimeter.

e) The following table shows the marks of 35 students in maths test. Represent these data by frequency polygon.


Sets	5–	10–	15–	20–	25–	Total
Frequency	5	9	11	6	4	35

11 Kafr El Sheikh Governorate - Maths Supervision

1 Choose the correct answer:

- 1) The set of even numbers $(\mathbb{E}) \cap$ the set of odd numbers $(\mathbb{O}) = \dots\dots\dots$.
(0 or 1 or 2 or \emptyset)
- 2) If a circumference of a circle is 22 cm, then the diameter length = cm.
(3.5 or 7 or 8 or 11)
- 3) If $x + 5 = 15$, then $x - 1 = \dots\dots\dots$.
(8 or 9 or 10 or 11)
- 4) The triangle whose base length is 8 cm and corresponding height is 5 cm.
Its area = cm^2 .
(13 or 20 or 26 or 40)
- 5) If $X = \{x : x \in \mathbb{N}, x < 3\}$, then $X = \dots\dots\dots$.
($\{1\}$ or $\{0, 1\}$ or $\{0, 1, 2\}$ or \emptyset)
- 6) On the coordinate plane:
M (1, 2), N (1, 8), then MN = length units.
(2 or 5 or 6 or 8)
- 7) The rhombus has line(s) of symmetry.
(zero or 1 or 2 or 4)
- 8) If $x = 2$, $y = 3$, then $4xy = \dots\dots\dots$.
(6 or 9 or 12 or 24)
- 9) The area of the square whose diagonal length is 6 cm = cm^2 .
(12 or 18 or 24 or 36)
- 10) The perimeter of the equilateral triangle whose side y cm =
($y + 3$ or $y + 6$ or $3y$ or $6y$)
- 11) If $2a + 7 = 21$, then the constant is
(a or $2a$ or y or 7)
- 12) $\frac{0}{7} \dots\dots\dots \mathbb{N}$.
(\in or \notin or \subset or \supset)
- 13) The product of the number k and 6 is 24, then the number $k = \dots\dots\dots$.
(30 or 24 or 8 or 4)
- 14) The smallest counting number is
(0 or 1 or 2 or 3)

2 Complete the following:

- 15) If the point A lies on the axis of reflection L, then its image by reflection in L is
16) The multiplicative neutral element in \mathbb{N} is
17) $(4 \times 31) \times 25 = (4 \times \dots\dots\dots) \times 31 = \dots\dots\dots$.
18) The geometric transformation  is

19) $\frac{\text{the circumference of the circle}}{\text{the length of the diameter}} = \dots\dots\dots$

20) Write the set which represents the points on the number line:



21) If we multiply the number x by 5 and subtract the product from 4, we will get the expression $\dots\dots\dots$

22) The area of the rhombus whose diagonal lengths are 6 cm and 8 cm = $\dots\dots\dots$ cm²

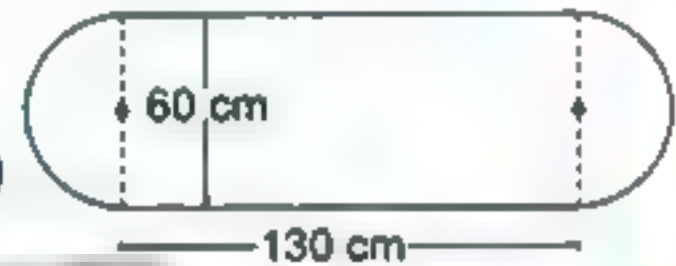
3 23) a) Solve the equation:

$$2x + 9 = 21, x \in \mathbb{N}$$

b) Use the properties of operations in \mathbb{N} to find:

$$45 \times 127 - 45 \times 27$$

24) Calculate the perimeter of the opposite figure. ($\pi = 3.14$)



25) On the coordinate plane draw the following points A (3, 5), B (5, 5) and C (3, 2).

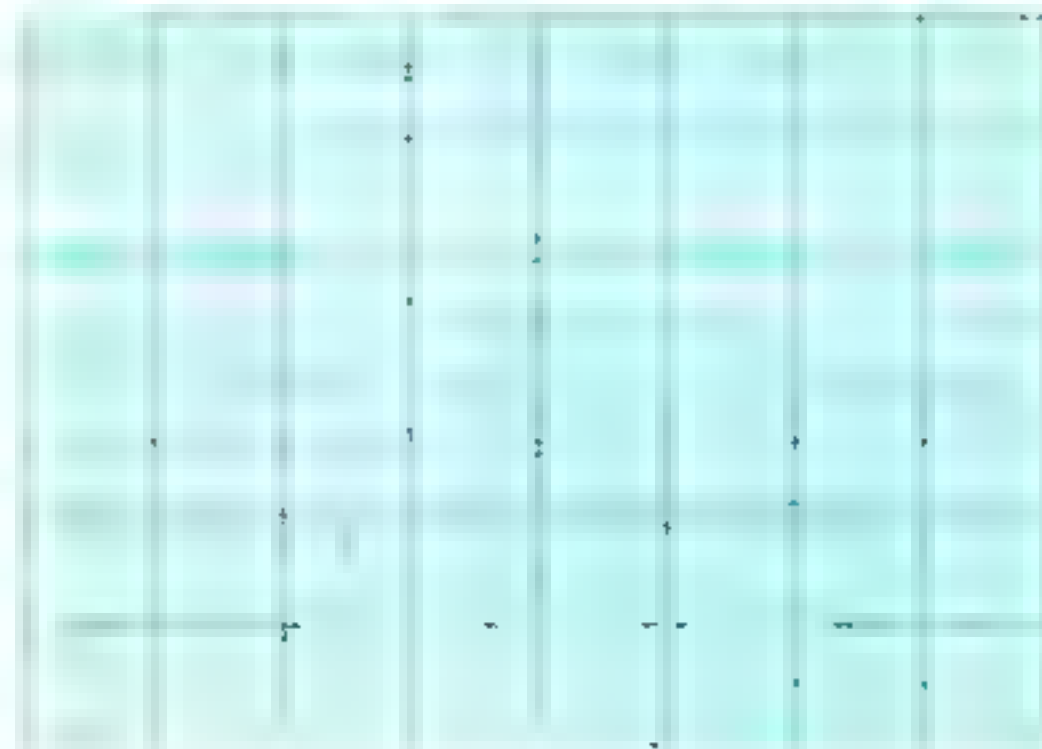
a) Find the length of \overline{AC} .

b) Draw the image of $\triangle ABC$ by reflection across \overline{AC} .

26) The following table represents the marks of 50 students in the maths exam in a month where the full mark is 50:

The sets	10-	20-	30-	40-	Total
Frequency	10	12	18	10	50

Draw the frequency polygon which represents the given data.



12 Damietta Governorate – Official Language Schools

1 Choose the correct answer:

- 1) The smallest counting number is (0 or 1 or 2 or 3)
- 2) $\frac{1}{2}$ \mathbb{N} . (∈ or ∉ or ⊂ or ⊄)
- 3) The symbolic expression of subtracting 5 from the number x is

(5 x or 5 – x or x – 5 or x + 5)

- 4) The number of axes symmetry of the square = (1 or 2 or 3 or 4)

- 5) Area of a parallelogram =

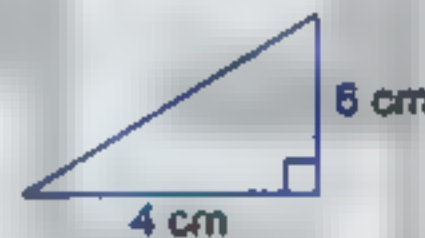
($\frac{1}{2} \times \text{base} \times \text{height}$ or $\text{base} \times \text{height}$ or $\frac{1}{2}$ the product of its diagonal lengths or diagonal length \times diagonal length)

- 6) $(93 + 87) - (87 + 93) = \dots\dots\dots$ (zero or 87 or 180 or 186)

- 7) $7 \times (98 + 3) = 7 \times 98 + 7 \times 3$ (.. . . . property)

(associative or commutative or neutral additive element or distributive)

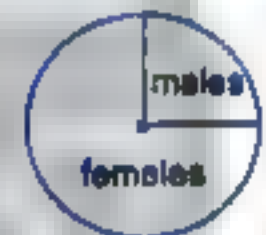
- 8) The area of opposite triangle = . . cm^2 .



(12 or 24 or 36 or 48)

- 9) The area of the square whose diagonal is 6 cm = . . cm^2 . (6 or 18 or 36 or 42)

- 10) 220 candidates have applied for a test to hire male and female anchorpersons in the television, if the opposite pie graph represents the given data, then the number of male candidates = males.



(22 or 55 or 110 or 220)

- 11) The area of a rhombus whose diagonal lengths are 7 cm and 9 cm = cm^2 .

(31 or 31.5 or 36 or 63)

- 12) On the number line:

The length of \overline{AB} = units of length.

(2 or 4 or 5 or 6)

- 13) The number of altitudes in a parallelogram = (1 or 2 or 3 or 4)

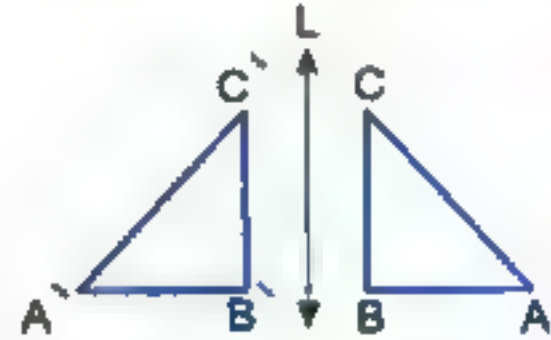
- 14) The following table shows the recorded temperature in 40 cities on a day:

Temperatures	20–	22–	24–	26–	Total
Number of cities	7	9	11	3	30

The number of cities with temperature less than 24 degrees. (16 or 27 or 20 or 7)

2 Complete the following:

- 15) 2, 4, 8, , 32. (in the same pattern)
- 16) $(4 \times 31) \times 25 = (31 \times 4) \times 25$ property.
- 17) $999 + 1 + 487 = (999 + 1) + 487$ property.
- 18) x , y are two numbers, the greater number is 3 more than the other, if the smaller is y , then $x = \dots\dots\dots$.
- 19) The opposite transformation is



- 20) The number of axes of symmetry of the equilateral triangle =
- 21) The area of the parallelogram whose base length is 60 cm and height is 40 cm = cm^2
- 22) If $x - 3 = 5$, $x \in \mathbb{N}$, then $x = \dots\dots\dots$.

3 Answer the following:

- 23) Using the properties of multiplication in \mathbb{N} . Find:

The value of: $2 \times 347 \times 5$ (Tell the property used)

$$= \dots\dots\dots (\dots\dots\dots)$$

$$= \dots\dots\dots (\dots\dots\dots)$$

$$= \dots\dots\dots$$

- 24) Solved the equation: $x + 3 = 12$, $x \in \mathbb{N}$

- 25) A circle of diameter length 10 cm.

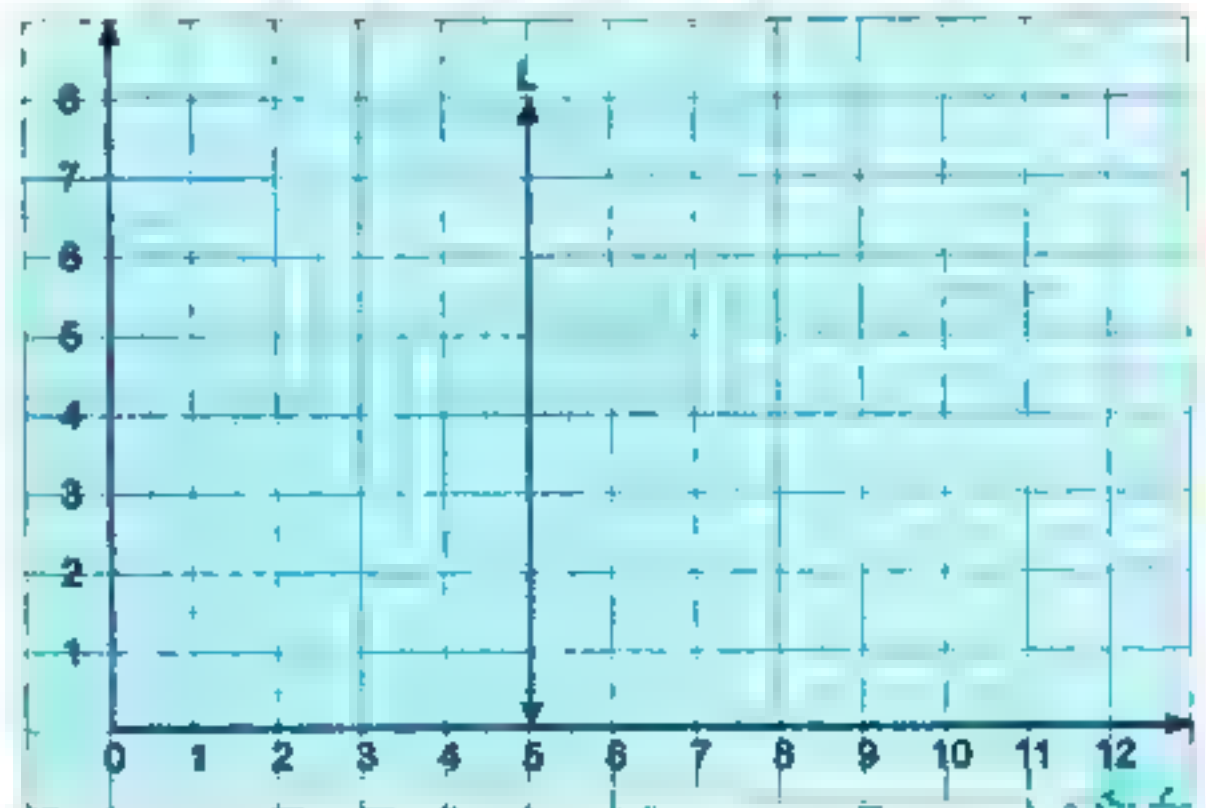
Find its circumference. ($\pi = 3.14$)

- 26) In the Cartesian coordinates:

Determine the points A (7 , 2),

B (9 , 6), then draw \overline{AB} , then draw

its image by reflection across L.



13 Sharkia Governorate - Diarb Negm Educational Zone - El Sweedy Gov. Lang. School .

1 Choose the correct answer:

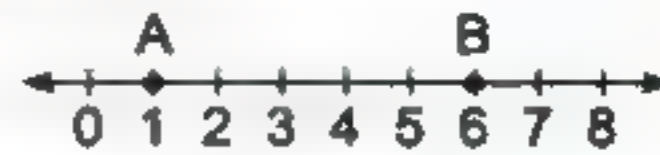
- 1) $(3 - 5) \dots\dots\dots \mathbb{N}$. (E or \notin or C or \emptyset)
- 2) The set of even number (\mathbb{E}) \cap the set of prime numbers (\mathbb{P}) = $\dots\dots\dots$. (\emptyset or 0 or N or { 2 })
- 3) $7 \times 98 = 7 \times 100 - 7 \times \dots\dots\dots$. (98 or 2 or 100 or 7)
- 4) If the side length of an equilateral triangle is L cm, then the mathematical relation between its perimeter and its side = $\dots\dots\dots$. ($L + 3$ or $4L$ or $L + 4$ or $3L$)
- 5) If $x - 3 = 5$, then $2x = \dots\dots\dots$. (16 or 8 or 4 or 6)
- 6) The number of axes of symmetry of the isosceles triangle = $\dots\dots\dots$. (1 or 2 or 3 or 4)
- 7) In the figure below:
XYZ is transformed into $X'Y'Z'$, then this transformation is called $\dots\dots\dots$. (reflection or translation or rotation)
- 8) A circle of diameter 5 cm, then circumference = $\dots\dots\dots \pi$ cm. (5 or 10 or 22 or 7)
- 9) The area of the square whose diagonal length is 6 cm = $\dots\dots\dots \text{cm}^2$. (9 or 36 or 24 or 18)
- 10) The area of a triangle with base length 20 cm and its corresponding height is 7 cm = $\dots\dots\dots \text{cm}^2$. (140 or 70 or 280 or 350)
- 11) If the circumference of a circle 22 cm, then its radius = $\dots\dots\dots$ cm. ($\pi = \frac{22}{7}$)
(22 or 11 or 7 or 3.5)
- 12) The area of a parallelogram whose base length is 10 cm and corresponding height is 8.4 cm = $\dots\dots\dots \text{cm}^2$. (0.84 or 840 or 42 or 84)
- From the opposite table:
- | Sets | 10- | 20- | 30- | Total |
|---------------|-----|-----|-----|-------|
| No. of pupils | 7 | 13 | 5 | 25 |
- 13) The centre of the set 20 - is $\dots\dots\dots$. (15 or 20 or 25 or 30)
- 14) The number of students who got less than 30 marks = $\dots\dots\dots$. (20 or 13 or 7 or 29)

2 Complete the following:15) The multiplicative neutral element in \mathbb{N} is16) If x is an odd number, then $(x + 3)$ is number.

17) 2, 4, 8, 16, (in the same pattern)

18) A man's age now is x years, then this age after 3 years =

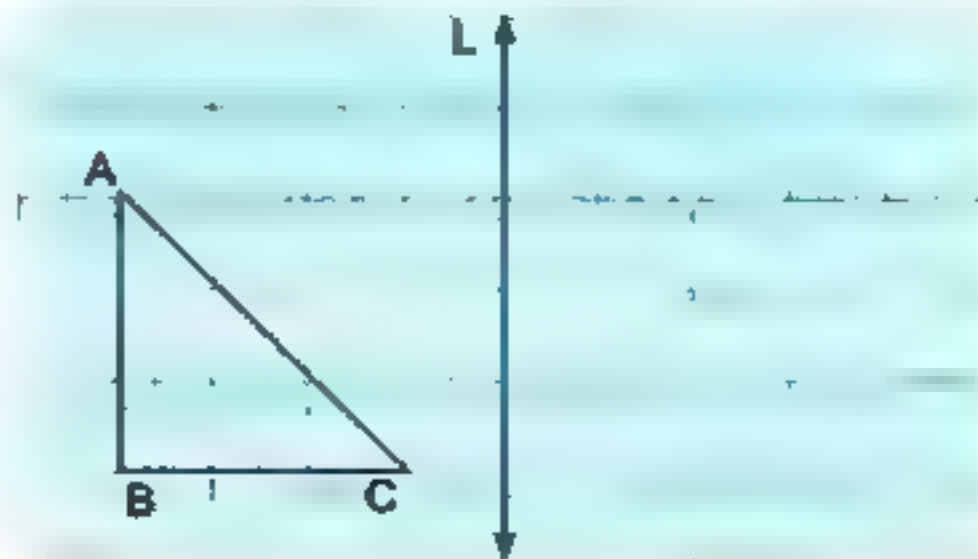
19) In the opposite number line:

The length of \overline{AB} = units.20) If the area of a square is 25 cm^2 , then its side length = cm.21) $28 + 57 = 57 + 28$. (..... property)22) The shaded sector of  represents of the circle.**3 Answer the following:**23) Using the properties of the operations in \mathbb{N} , find the result: of $8 \times 73 \times 125 = \dots\dots\dots$ 24) Find the solution set of: $3x + 2 = 8$, where $x \in \mathbb{N}$

25) Which is greater in area:

A rhombus whose two diagonal lengths are 6 cm and 8 cm or a square whose diagonal length is 8 cm.

26) In the coordinate plane:

If L is the axis of reflection of the triangle ABC.Draw its image by reflection in L .

14 Port Said Governorate – Educational Directorate – Maths Inspectorate

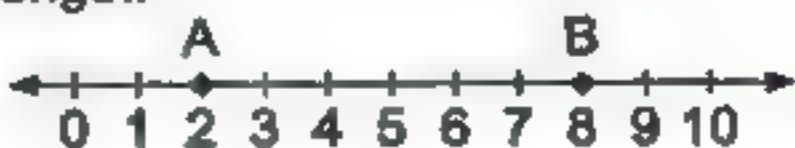
1 Complete each of the following:



- 1) The opposite transformation is called
- 2) The set of natural numbers which are less than 2 is { }.
- 3) If the point A lies on the axis of reflection (L), then its image by reflection across (L) is =
- 4) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$
- 5) The area of the square whose diagonal length is 6 cm = cm^2 .
- 6) The symbolic expression for "x multiplied by 5" is
- 7) 13 , 16 , 19, (in the same pattern)
- 8) The following table shows the marks of 50 pupils, complete the following table:

Sets	10–	20–	40–	Total
Frequency	10	12	18	10	50

4 Choose the correct answer:

- 9) $7 - 5 \dots \dots \dots \mathbb{N}$ (E or \notin or C or \subset)
- 10) The set of even numbers (E) \cap the set of odd numbers (O) = (O or E or \mathbb{N} or \emptyset)
- 11) If we add 3 to twice a number "x", then we get the number
(3 x or $3 + x$ or $2x + 3$ or $2x$)
- 12) 2 456 3 645 (> or < or = or otherwise)
- 13) The area of the rhombus whose diagonals are 12 cm and 16 cm = cm^2 .
(59 or 96 or 56 or 192)
- 14) The length of \overline{AB} = units length.

(2 or 4 or 5 or 6)
- 15) The area of the triangle whose base length is 12 cm and corresponding height 5 cm = cm^2 . (30 or 60 or 17 or 34)
- 16) The number of lines of symmetry of the rectangle = (1 or 2 or 3 or 4)
- 17) If the sum of two numbers x , y is 20, then y =
($20 + x$ or $20 - x$ or $x - 20$ or 8)

- 18) The area of the parallelogram whose base length is 8 cm and corresponding height is 5 cm = cm^2 . (40 or 13 or 26 or 20)
- 19) The shaded sector represented in the opposite figure = the circle. ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or 1)
- 20) $(93 + 7) - (7 + 93) = \dots$. (1000 or 100 or 10 or 0)
- 21) If $4x = 20$, $x \in \mathbb{N}$, then $x = \dots$. (5 or 4 or 3 or 2)
- 22) The smallest natural number is (0 or 1 or 2 or 3)



- 3 23) Find the solution set of the equation: (where $x \in \mathbb{N}$)

$$4x - 7 = 33$$

- 24) The circle whose diameter length is 14 cm. Calculate its circumference. ($\pi = \frac{22}{7}$)

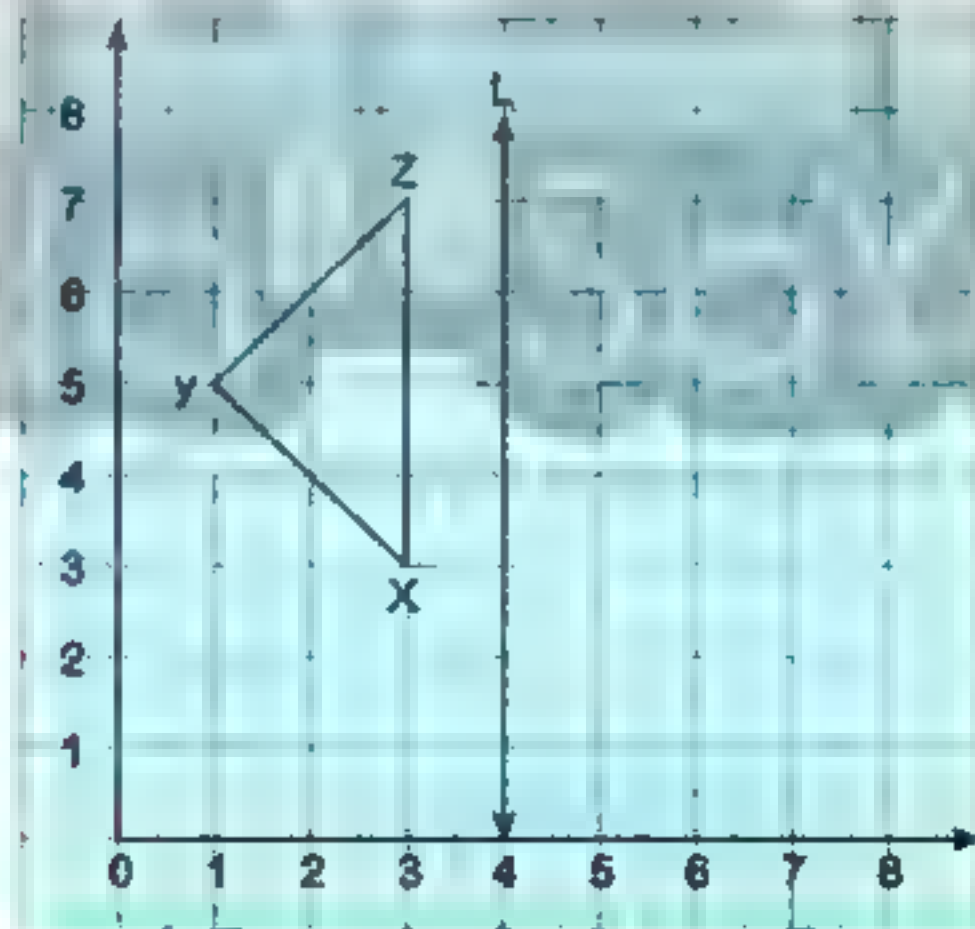
- 25) By using the properties of addition in \mathbb{N} , find the result of:

$$53 + 76 + 47 + 24$$

- 26) In the opposite coordinates plane:

If L is the axis of reflection for the figure XYZ.

Draw its image by reflection in L.



15 Ismailia Governorate Directorate of Educational Al-Manar Language School

1 Choose the correct answer:

- 1) $\{0, 1, \frac{8}{4}\}$ \mathbb{N} . (E or \notin or C or \varnothing)
- 2) The area of square whose diagonal length is 6 cm = cm^2 . (18 or 36 or 24 or 12)
- 3) \mathbb{N} – Set of counting numbers = (0 or \mathbb{N} or \mathbb{E} or $\{0\}$)
- 4) The smallest prime number is (0 or 1 or 2 or 3)
- 5) Subtract 3 from twice the number M is written as
($3 + 2M$ or $2M - 3$ or $3 - 2M$ or $M - 3$)
- 6) Which of the following represents rotation?
($\begin{smallmatrix} \text{MATH} \\ \text{WATH} \end{smallmatrix}$ or $\begin{smallmatrix} \text{HATH} \\ \text{MATH} \end{smallmatrix}$ or $\begin{smallmatrix} \text{MATH} \\ \text{MATH} \end{smallmatrix}$)
- 7) The rhombus has line(s) of symmetry. (0 or 1 or 2 or 3)
- 8) The area of the rhombus whose diagonal lengths are 12 cm and 10 cm = cm^2 . (12 or 48 or 120 or 60)
- 9) The diameter length of the circle whose circumference is 7π cm = cm. (7 or 3.5 or 14 or 22)
- 10) If $x = 2$, $x \in \mathbb{N}$, then $2x + 1 =$ (2 or 3 or 4 or 5)
- 11) If area of a triangle is 40 cm^2 and the length of its base is 10 cm, then the corresponding height = cm. (4 or 8 or 5 or 16)
- 12) The area of the parallelogram whose base length is 6 cm and its corresponding height is 4.5 cm = cm^2 . (13.5 or 27 or 18 or 36)
- 13) The perimeter of the equilateral triangle whose side length is L cm =
($L + 3$ or $3L$ or $6 - L$ or $6L$)
- 14) $\mathbb{P} - \mathbb{Q} =$
(\mathbb{P} or $\{0\}$ or $\{2\}$ or \mathbb{N})

2 Complete each of the following:

- 15) If x an odd number, then $(x + 1)$ is number.
- 16) 1, 3, 6, 10, 15 (in the same pattern)
- 17) Two numbers x and y, their sum is 18, then $y =$
- 18) If $2m - 1 = 7$, then $m =$
- 19) The additive neutral element in \mathbb{N} is

20) The opposite geometric transformations is

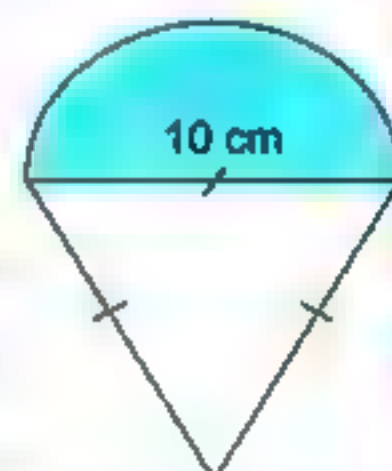


21) The triangle whose side lengths are 3 cm, 4 cm and 3 cm has .. lines of symmetry.

22) Area of a triangle = base \times height \div

3 Answer the following:

23) Calculate the perimeter of the opposite figure. ($\pi = 3.14$)



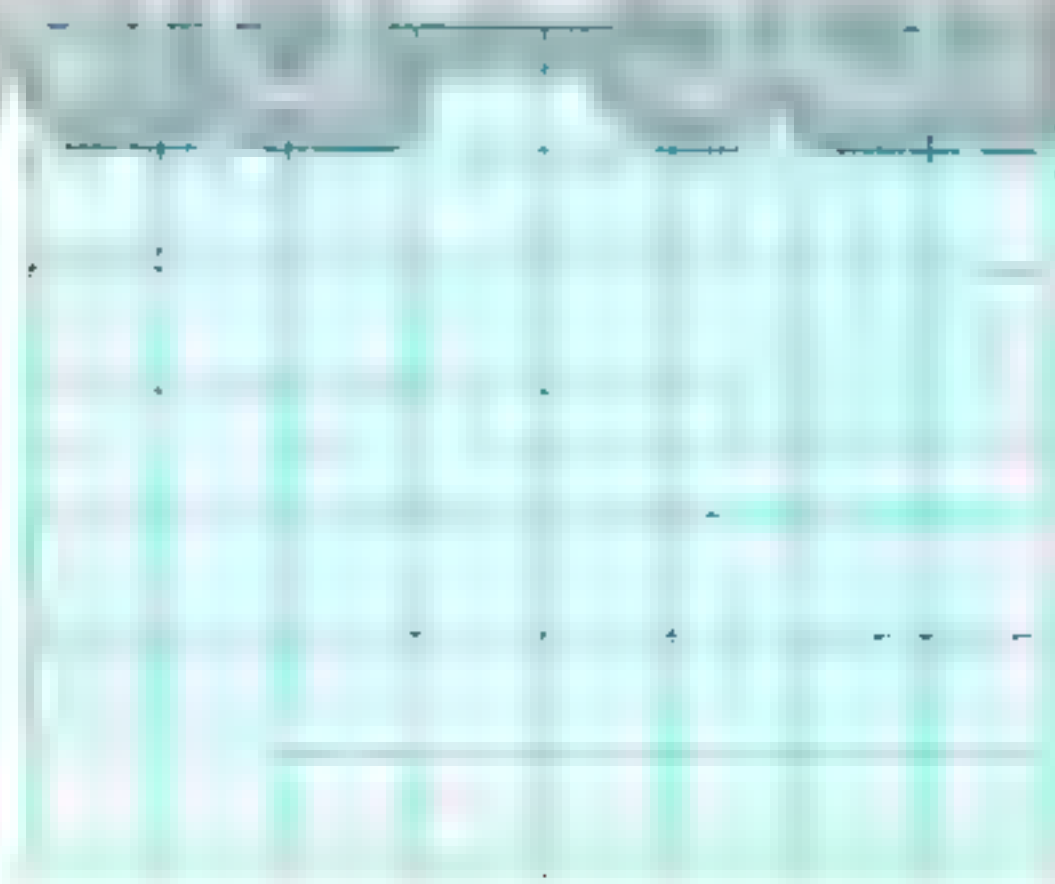
24) Use the distributive property to find 37×101

25) Solve the equation $2x + 3 = 13$

26) The following data represent marks in a test for students in grade five:

Sets	10–	15–	20–	25–	Total
Frequency	7	13	15	5	40

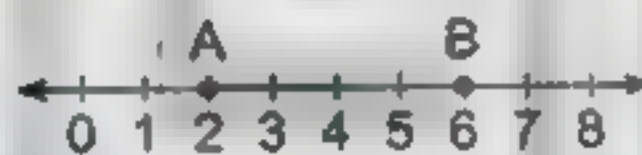
Represent these data using frequency polygon.



16 Suez Governorate Directorate of Education Mathematics Inspectorate

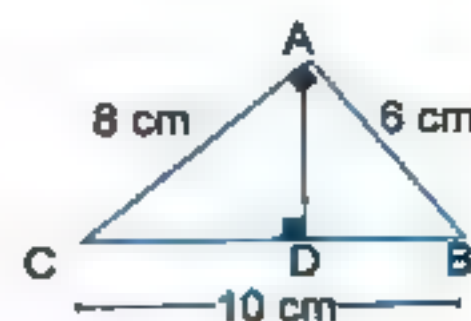
1 Choose the correct answer:

- 1) The smallest natural number is (0 or 1 or 2 or 10)
- 2) A circle of diameter 28 cm, its circumference = cm. ($\pi = \frac{22}{7}$) (22 or 44 or 88 or 56)
- 3) $(93 + 7) - (7 + 93) = \dots\dots\dots$ (0 or 10 or 100 or 1000)
- 4) $15 - 3 \times 6 + 2 + 1 = \dots\dots\dots$ (2 or 9 or 37 or 7)
- 5) The area of square whose perimeter 32 cm = cm^2 . (128 or 32 or 64 or 1024)
- 6) $75 + 89 = 89 + \dots\dots\dots$ (75 or 100 or 0 or 89)
- 7) $\{ \dots \} \dots\dots\dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 8) If $x - 3 = 5$, $x \in \mathbb{N}$, then $x = \dots\dots\dots$ (2 or 6 or 7 or 8)
- 9) $\{ 0 \} \dots\dots\dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 10) The set of even numbers $(\mathbb{E}) \cap$ the set of prime numbers $(\mathbb{P}) = \dots\dots\dots$. (\mathbb{P} or \mathbb{N} or \mathbb{O} or $\{2\}$)
- 11) 2456 $\dots\dots\dots$ 3645 ($>$ or $<$ or $=$ or \geq)
- 12) $7 - 5 \dots\dots\dots \mathbb{N}$. (\subset or \supset or \in or \notin)
- 13) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$ (2 or 4 or 3 or 5)
- 14) On the number line:
The length of $\overline{AB} = \dots\dots\dots$ length units. (2 or 4 or 5 or 6)



2 Complete each of the following:

- 15) 100, 85, 70 (in the same pattern)
- 16) The symbolic expression of multiplying 5 by the number x is
- 17) If the point A lies on the axis of reflection L, then its image by reflection in L
- 18) The natural numbers less than 2 are
- 19) For any two natural numbers a and b : $a \times b = b \times a$ property.
- 20) 8, 16, 24, (in the same pattern)
- 21) The additive neutral element in \mathbb{N} is where the multiplicative neutral element in \mathbb{N} is
- 22) In the opposite figure:
ABC is right-angled triangle at A, $\overline{AD} \perp \overline{BC}$,
then the length of $\overline{AD} = \dots\dots\dots$.

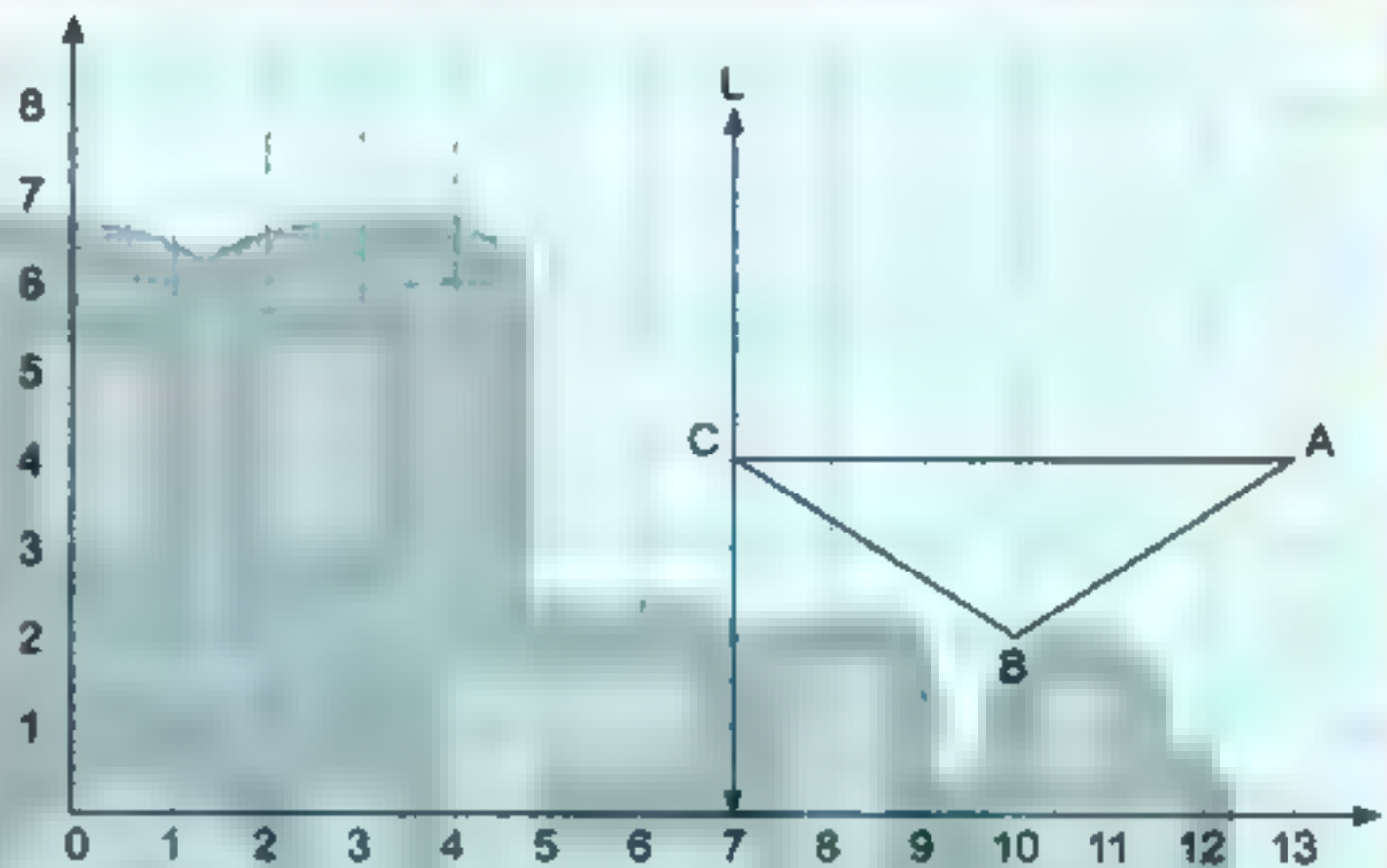


3 Find the result:

a) Which is greater:

A rhombus which diagonal lengths are 6 cm and 8 cm or a square whose diagonal length is 8 cm.

b) On the coordinate plane, if L is the axis of reflection for the triangle ABC, draw the image of $\triangle ABC$ in the straight line L.



4 Answer the following:

a) (1) If $a = 4$, $b = 3$ and $c = 0$, find the value of $(a + b - c) \times (a + b)$

(2) Find the product of. 45×99 (using the distributive property)

b) The following table shows the marks of 35 students in maths test:


The sets	5–	10–	15–	20–	25–	Total
Frequency	5	9	11	6	4	35

Represent these data using frequency polygon.

17

South Sinai Governorate - Maths Supervision

1 Choose the correct answer:

- 1) $(7 - 5) \dots \dots \dots \mathbb{N}$. (\in or \notin or \subset or \varnothing)
- 2) The set of even numbers (\mathbb{E}) \cap the set of odd numbers (\mathbb{O}) $\dots \dots \dots$. (0 or 2 or 1 or \emptyset)
- 3) If $x - 3 = 5$, $x \in \mathbb{N}$, then $x = \dots \dots \dots$. (2 or 6 or 7 or 8)
- 4) The area of the rhombus whose diagonal lengths are 12 cm and 16 cm = $\dots \dots \dots$ cm².
(69 or 96 or 56 or 192)
- 5) The smallest natural number is $\dots \dots \dots$. (0 or $\frac{1}{2}$ or 1 or 2)
- 6) The symbolic expression for three times of a number added to 5, is $\dots \dots \dots$.
($5x + 3$ or $3x + 5$ or $3x - 5$ or $x + 5$)
- 7) The set of natural numbers \cap the set of counting numbers ($\mathbb{N} \cap \mathbb{C}$) = $\dots \dots \dots$.
(\mathbb{C} or \mathbb{N} or \emptyset or \mathbb{E})
- 8) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$ (2 or 4 or 3 or 5)
- 9) A circle of diameter length 14 cm, then its circumference = $\dots \dots \dots$ cm. ($\pi = \frac{22}{7}$)
(88 or 22 or 44 or 14)
- 10) 2456  2645 $\dots \dots \dots$ ($>$ or $<$ or $=$ or \geq)
- 11) If a man's age now is x years, $x \in \mathbb{N}$, then his age after 8 years is $\dots \dots \dots$.
($8x$ or $\frac{8}{x}$ or $x - 8$ or $x + 8$)
- 12) $213 + 57 = 57 + 213$ ($\dots \dots \dots$ property).
(commutative or associative or distributive or additive identity)
- 13) Two numbers x , y their sum equals 20, then $y = \dots \dots \dots$.
($20 + x$ or $20 - x$ or $x - 20$ or $\frac{x}{20}$)
- 14) 99 added to the neutral element of multiplication = $\dots \dots \dots$. (92 or 98 or 100 or 199)

2 Complete each of the following:

- 15) $9 \times 13 = 13 \times x$, then $x = \dots \dots \dots$.
- 16) 1, 3, 9, 27, $\dots \dots \dots$. (in the same pattern)
- 17) The area of the square whose diagonal length is 6 cm = $\dots \dots \dots$.
- 18) $(93 + 87) - (87 + 93) = \dots \dots \dots$.

- 19) If the point A lies on the axis on reflection L, then its image by reflection in L
- 20) The perimeter of the equilateral triangle whose side length is L cm = cm.
- 21) The set of natural numbers less than 5 is
- 22) The symbolic expression of multiplying 5 by the number x is

- 3 23) By using the properties in \mathbb{N} , find the result, and tell the property used:

$$2 \times 347 \times 5$$

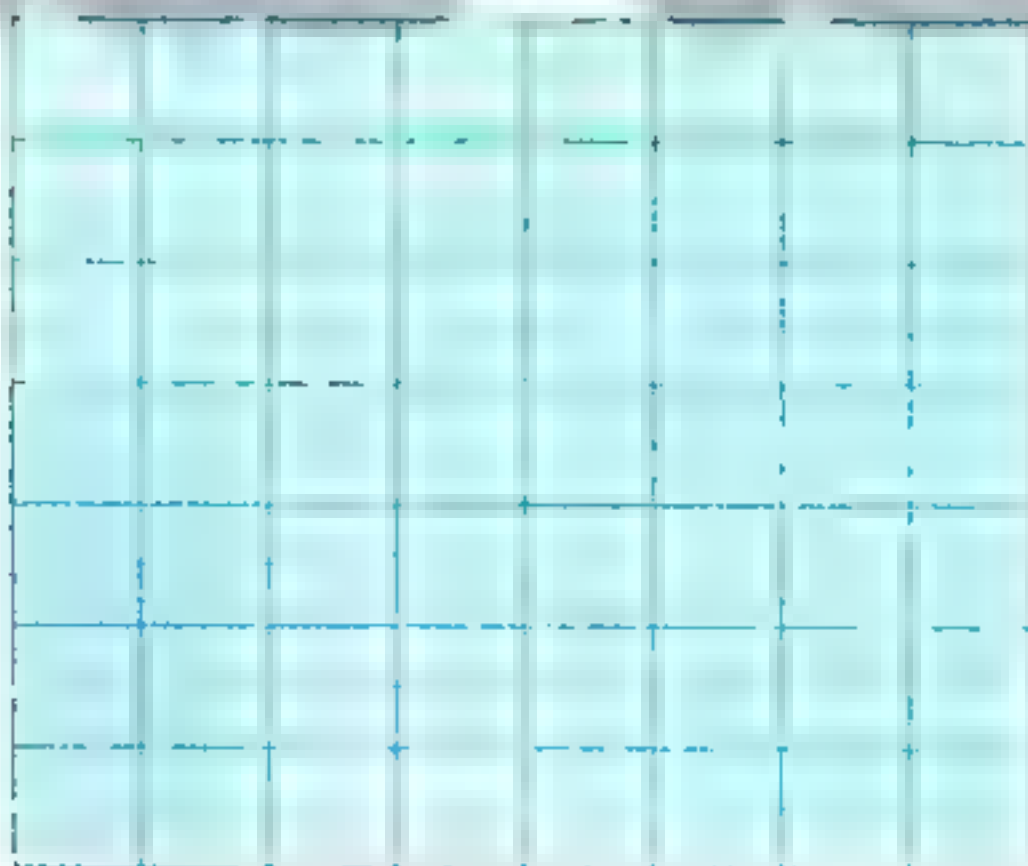
- 24) Write the suitable symbolic expression. If we add 6 to the number x , the result will be 26.

- 25) Find the area of a triangle of base length 12 cm and height 5 cm.

- 26) The following table shows the marks of 50 pupils in maths test in one month where the maximum mark is 50 marks:

Sets	10–	20–	30–	40–	Total
Frequency	10	12	18	10	50

Draw each of the histogram and the frequency polygon to this distribution.

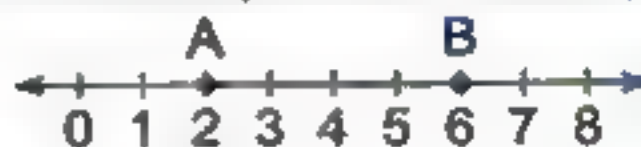


18 El-wadi Al-Gadeed Governorate - El-Kharga Educational Directorate

1 Choose the correct answer:

1) $\frac{1}{7}$ \mathbb{N} . (E or F or C or D)2) The area of the square whose diagonal length is 6 cm = cm^2 . (12 or 18 or 81 or 36)3) If x is an odd number, then $(x + 1)$ is number. (even or odd or prime or otherwise)

4) On the number line:

The length of \overline{AB} = length units. (2 or 4 or 5 or 6)5) If \odot is the set of odd numbers, then \odot \mathbb{N} . (E or F or C or D)6) The area of a rhombus whose diagonal lengths are 12 cm and 16 cm = cm^2 .
(69 or 96 or 56 or 192)

7) The following table shows the recorded temperatures in 40 cities on a day

Temperatures	20–	22–	24–	26–	28–	Total
Number of cities	7	9	11	8	5	40

The number of cities with temperatures less than 24 degrees Celsius is cities.
(11 or 16 or 27 or 13)

8) The number of symmetry axes of an equilateral triangle = (4 or 3 or 2 or 1)

9) $213 + 87 = 87 + 213$ (..... property)
(associative or commutative or neutral additive or closure)10) The perimeter of an equilateral triangle whose side length x cm = cm.
($x + 3$ or $3x$ or $6 + x$ or $6x$)

11) In the oppos.te figure:

M, N are two natural numbers, then ($N < M$ or $N > M$ or $M = N$ or $M \geq N$)12) A circle of diameter 28 cm, its circumference = ($\pi = \frac{22}{7}$) (22 or 44 or 88 or 56)

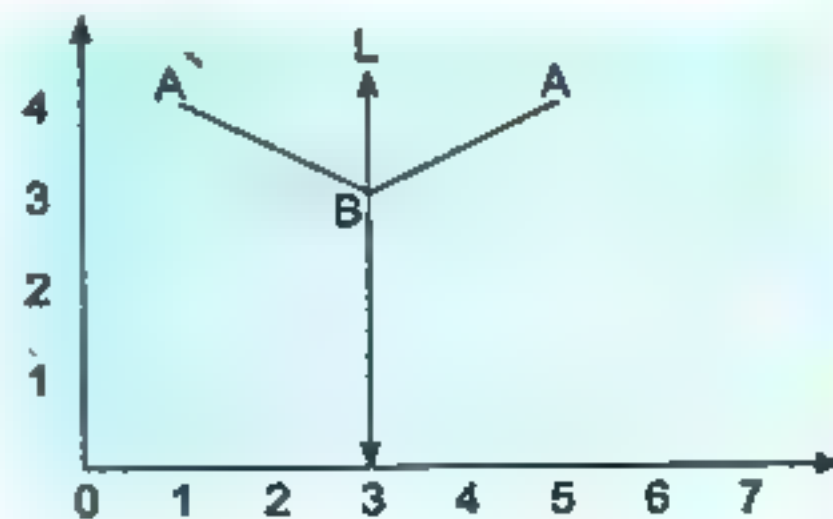
13) The smallest natural number is (0 or 1 or 2 or 10)

14) On the opposite coordinate plane:

the image of the point A by reflection in L

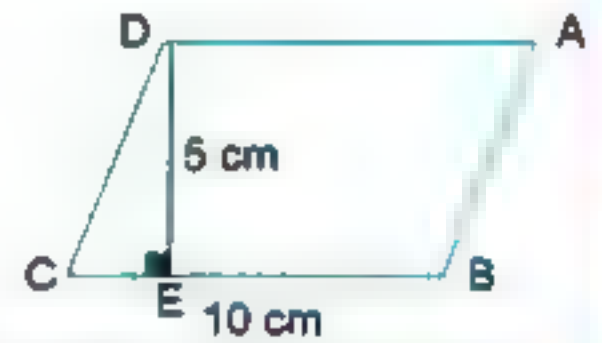
is

((5, 4) or (3, 3) or (1, 4) or (4, 1))

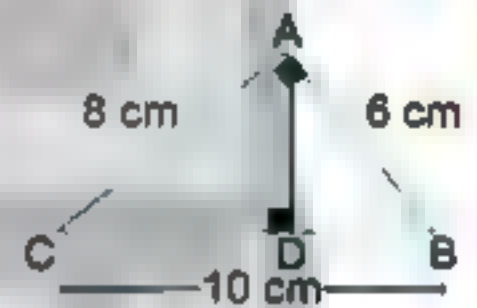


2 Complete each of the following:

- 15) The area of the rhombus in which the length of its side is 10 cm and corresponding height is 9.6 cm = cm^2 .
- 16) 8 , 16 , 24 , (in the same pattern)
- 17) The symbolic expression for "adding 3 to the double of the number x " is
- 18) The radius of a circle whose circumference is 88 cm = cm.
- 19) If the point A lies on the axis of reflection L, then its image by reflection in L is
- 20) The multiplicative neutral element in \mathbb{N} is
- 21) If $86 \times 15 = 86 \times y + 86 \times 10$, then $y = \dots$
- 22) The area of the opposite parallelogram = cm^2 .

**3 Answer the following question:**

- 23) Find the solution set of the equation: $2x + 9 = 21$
.....
- 24) In the opposite figure: ABC is right-angled triangle at A, $AD \perp BC$. Find the length of AD.



- 25) Use the distributive property to find:
 $45 \times (10 + 2)$
.....

- 26) The following table shows the marks of 50 pupils in maths test in one month, where the maximum mark is 50 marks.


Sets	10–	20–	30–	40–	Total
Frequency	10	12	18	10	50

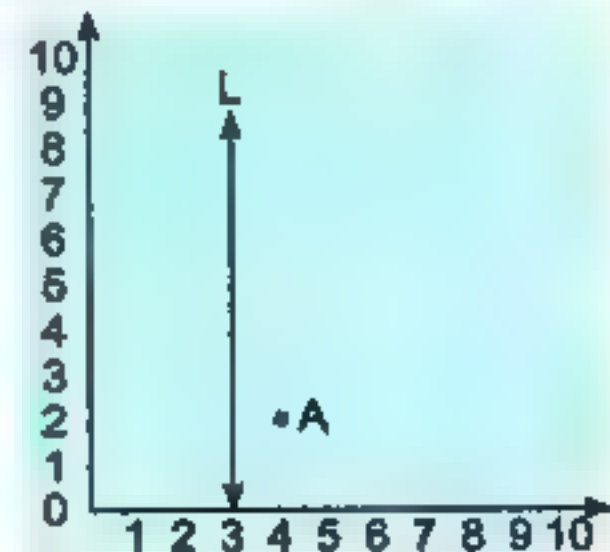
Represent these data by frequency polygon.

19

Fayoum Governorate Maths Supervision

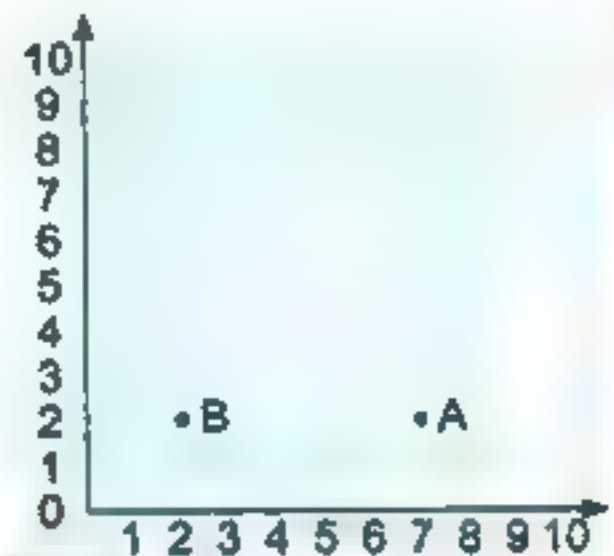
1 Choose the correct answer:

- 1) The set of even numbers \cap the set of odd numbers =
(natural numbers or odd numbers or even numbers or \emptyset)
- 2) The set of natural prime numbers less than 5 is
($\{1, 3\}$ or $\{1, 2\}$ or $\{2, 3\}$ or $\{1, 2, 3\}$)
- 3) $\frac{1}{7}$ natural numbers.
(\in or \notin or \subset or \supset)
- 4) $\{\frac{12}{4}\}$ The set of odd numbers.
(\in or \notin or \subset or \supset)
- 5) If the side length of a square is x and its perimeter is P , then $P =$
($4x$ or $x+4$ or $x-4$ or $x+4$)
- 6) Circumference of the circle =
($2\pi r$ or πr or $\frac{1}{2}\pi r$ or πr^2)
- 7) The area of a rhombus whose length of its diagonals are 10 cm and 6 cm = cm^2 .
(100 or 60 or 36 or 30)
- 8) A parallelogram its base length is 8 cm and its corresponding height is 6 cm,
then its area = cm^2 .
(24 or 36 or 18 or 48)
- 9) The area of a square with diagonal length 10 cm = cm^2 . (25 or 50 or 100 or 20)
- 10) The area of the triangle with base length 6 cm and its height 5 cm = cm^2 .
(30 or 18 or 15 or 22)
- 11) The following table represents the temperature of 30 cities, then the number of cities whose temperature is 22 degrees or more = cities.
- | Temperature | 18– | 20– | 22– | 24– |
|---------------|-----|-----|-----|-----|
| No. of cities | 15 | 4 | 6 | 5 |
- (6 or 11 or 15 or 25)
- 12) 240 students (boys and girls) have applied for a test.
If the opposite graph represents the given data,
what is the number of boys who applied for that test?
- 
- (60 or 120 or 180 or 240)
- 13) Length of any line segment Length of its image by reflection.
($>$ or $=$ or $<$)
- 14) The image of the point A by reflection across L is
((2, 4) or (6, 3) or (2, 2) or (1, 3))



2 Complete each of the following:

- 15) If x is an odd number, then $x + 1$ is number.
- 16) 1, 4, 8, 13, (in the same pattern)
- 17) The multiplicative neutral element in $(\mathbb{N}) =$
- 18) If the sum of two numbers is 10 and one of them is x , then the other number is
- 19) From methods of representing data are and
- 20) The number of axes of symmetry of a rhombus is
- 21) In the opposite figure:
A (.....,) and B (.....,)
- 22) In the opposite figure:
The length of $\overline{AB} =$

**3 Find the result:**

23) Find using the properties of operation in \mathbb{N} :

a) $25 \times 37 \times 4$

b) $35 \times 118 - 35 \times 18$

24) Solve the following equation such that $x \in \mathbb{N}$: $2x + 9 = 21$

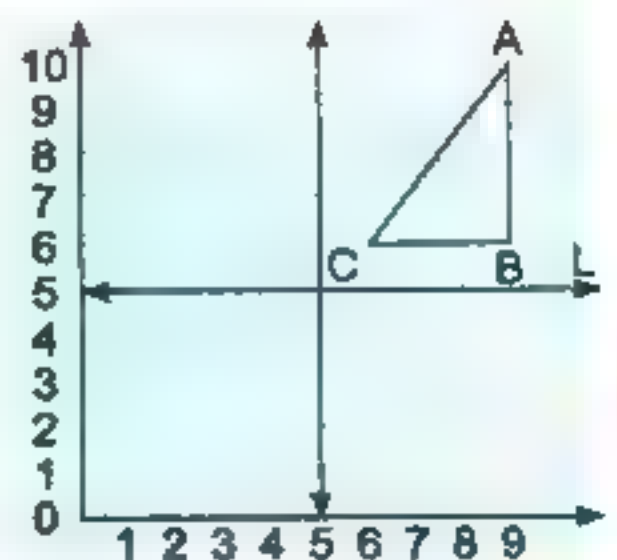
25) If the radius of a circle is 14 cm, find its circumference. ($\pi = \frac{22}{7}$)

26) Draw the triangle $A'B'C'$ as the image of the triangle ABC reflection in the straight line M and determine the coordinates of $\Delta A'B'C'$.

$A' (\quad , \quad)$

$B' (\quad , \quad)$


$C' (\quad , \quad)$



20 Beni Suef Governorate Directorate of Education Directorate of Official Language Schools

1 Choose the correct answer:

1) The smallest natural number is (0 or 1 or 2 or 3)

2) The area of the triangle of base length 12 cm and corresponding height is 5 cm = cm². (30 or 60 or 17 or 34)3) $\frac{6}{3}$ N. (\in or \notin or \subset or \supset)4) A, B are two natural numbers  then (A < B or A > B or A = B or A ≤ B)

5) The number of symmetry axes of the rectangle = (0 or 1 or 2 or 3)

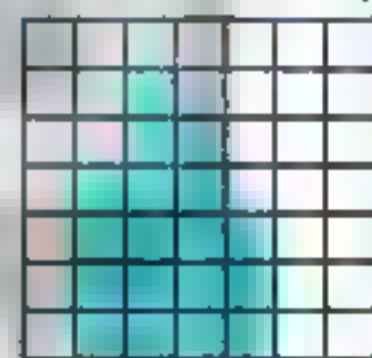
6) $(39 + 61) - (61 + 39) = \dots\dots\dots$ (0 or 1 or 100 or 200)

7) In the opposite figure:

 $\triangle DFE$ is transformed to $\triangle D'E'E'$,

then this transformation is called

(reflection or translation or rotation or otherwise)

8) If $x + 7 = 19$, $x \in N$, then $x = \dots\dots\dots$ (26 or 12 or 11 or 13)9) The opposite representation of the data is called a
(polygon or solid or histogram or circular sector)10) The area of the square whose diagonal length is 6 cm = cm². (18 or 36 or 12 or 6)11) The shaded part represents of the surface area of the circle. ($\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{1}{3}$ or $\frac{2}{3}$)12) The area of the rhombus whose diagonal lengths are 6 cm and 8 cm = cm². (48 or 84 or 24 or 12)

13) The following table shows the recorded temperature of 40 cities on a day.

The number of cities with temperatures less than 24 degrees Celsius = cities.

Temperature	20–	22–	24–	26–	Total
No. of cities	10	9	11	10	40

(11 or 19 or 20 or 27)

14) A circle of diameter 14 cm, $\pi = \frac{22}{7}$, its circumference = (22 or 44 or 88 or 98)

2 Complete each of the following:

15) The number of symmetry axes of an equilateral triangle =

16) The additive neutral element in \mathbb{N} 17) $(4 \times 37) \times 25 = (4 \times 25) \times$ 18) The area of the parallelogram = \times

19) The smallest counting number is

20) If x is an odd number, then $(x + 1)$ is number.

21) The opposite transformation is



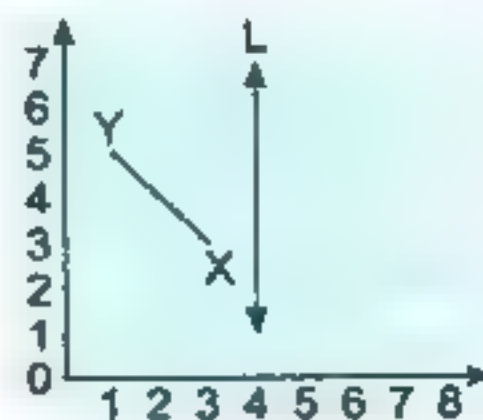
22) The following frequency table distribution shows the marks of a group of students in an exam.

Sets	5–	10–	15–	20–	25–	30–	35–	Total
No. of students	3	6	8	12	10	6	5	50

The number of students who got 30 marks or more is

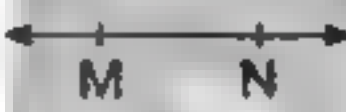


3 Find the result:23) Solve the following equation: $2x + 3 = 15$ 24) Using the properties of commutation and association in \mathbb{N} to find the result of addition (write the used property) $872 + 199 + 128 + 801$ 25) A circle of diameter length 10 cm, find its circumference. ($\pi = 3.14$)

26) In the opposite coordinates plane:

If L is the axis of reflection for \overline{XY} ,then find its image by reflection in L .

21 Menla Governorate - Kafr Elmansorah Formal Language Primary School

1 Choose the correct answer:

- 1) $7 - 5 \dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 2) The smallest natural number is \dots . (0 or 1 or 2 or 3)
- 3) Two numbers x, y their sum is 20, then $y = \dots$. ($20 + x$ or $20 - x$ or $x - 20$ or $\frac{x}{20}$)
- 4) If $x - 3 = 5$, $x \in \mathbb{N}$, then $x = \dots$. (2 or 6 or 7 or 8)
- 5) The area of the square whose diagonal length is 6 cm = \dots cm².
(12 or 18 or 36 or 83)
- 6) In the opposite figure  M, N are two natural numbers, then \dots .
($M < N$ or $M > N$ or $M = N$ or $M \geq N$)
- 7) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$ (2 or 4 or 3 or 5)
- 8) The circumference of a circle of radius length 4 cm = $\pi \times \dots$ cm. (4 or 8 or 16 or 10)
- 9)  The colored sector represents \dots of the circle. ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or $\frac{1}{8}$)
- 10) The opposite number line  represents the set of \dots numbers.
(odd or even or prime or \mathbb{N})
- 11) $x + 18 \dots x + 17$, where $x \in \mathbb{N}$. ($>$ or $<$ or $=$ or \geq)
- 12) $75 + 89 = 89 + \dots$ (75 or 100 or 89 or 120)
- 13) $\{1, 3\} \cap \{2, 4\} \dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 14) The perimeter of an equilateral triangle whose length is L cm = \dots cm.
($L + 3$ or $3L$ or $6 + L$ or $6L$)

2 Complete each of the following:

- 15) The symbolic expression of multiplying 5 by the number x is \dots .
- 16) If x is an odd number, then $(x + 1)$ is \dots number.
- 17) The area of the rhombus in which the length of its side is 10 cm and corresponding height is 9.6 cm = \dots cm².
- 18) 5, 15, 25 \dots , \dots (in the same pattern)
- 19) 99 added to the neutral element of multiplication = \dots .

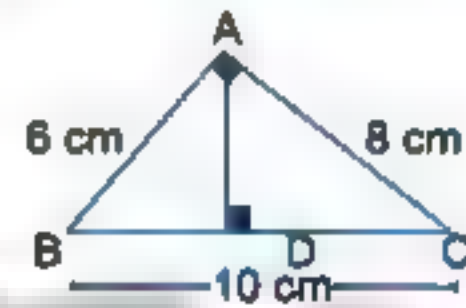
- 20) A man is x years old , where $x \in \mathbb{N}$, then his age after 8 years is
- 21) The set of natural numbers less than 5 is
- 22) Natural numbers \cap counting numbers ($\mathbb{N} \cap \mathbb{C}$) =

3 Find the result:

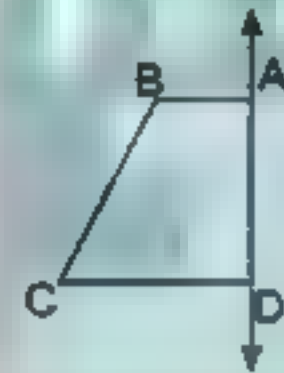
- 23) Find the result by using commutative and associative properties: $8 \times 49 \times 125$

- 24) In the following figure ABC is a right-angled triangle at A , $\overline{AD} \perp \overline{BC}$ find:

- a) The area of $\triangle ABC$.
b) The length of \overline{AD} .



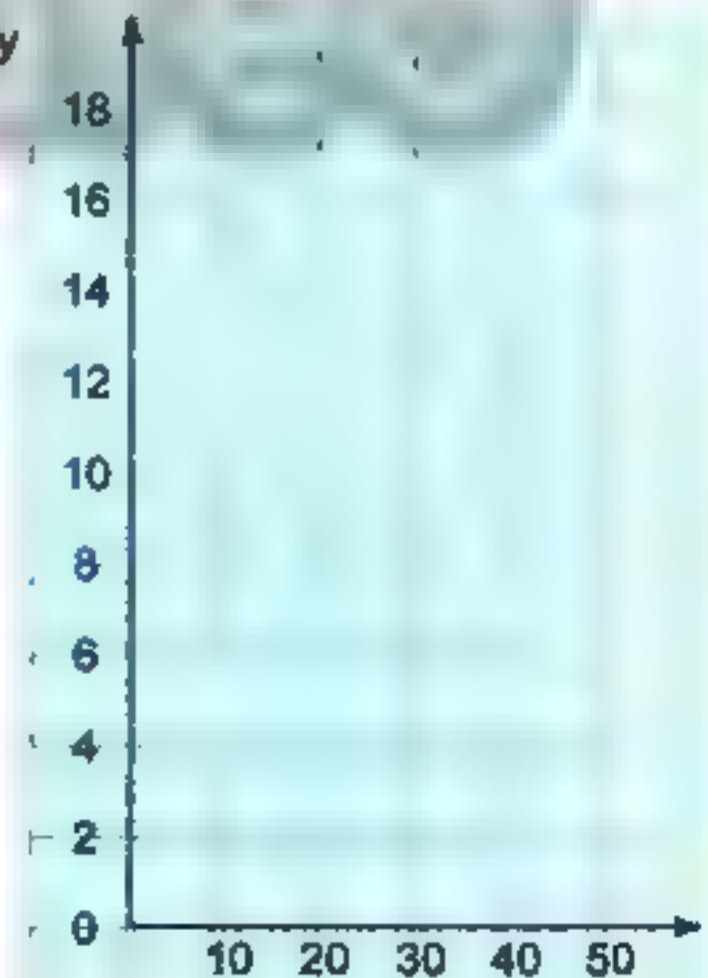
- 25) a) Determine the image of the following figure by reflection across \overline{L} .
b) The length of \overline{AD} = units.



- 26) The following table shows the marks of 50 pupils in a maths test in one month, where the max. mark is 50 marks:

Sets	10—	20—	30—	40—	Total
Frequency	10	12	18	10	50

Represent these data by frequency polygon.



22 Assuit Governorate - Administration of Governmental Language Schools

1 Choose the correct answer:

- 1) $\{1, 3\} \cap \{2, 4\} = \dots \dots \dots \mathbb{N}$. (\in or \notin or \subset or \varnothing)
- 2) $(93 + 7) - (7 + 93) = \dots \dots \dots$. (0 or 10 or 100 or 1000)
- 3) If subtract 5 from the number x , we get $\dots \dots \dots$. ($5x$ or $5 - x$ or $x - 5$ or $x + 5$)
- 4) The circumference of a circle of radius 35 cm = $\dots \dots \dots$ cm. ($\pi = \frac{22}{7}$)
(110 or 220 or 202 or 101)
- 5) The smallest counting number is $\dots \dots \dots$. (0 or 1 or 2 or 3)
- 6) The number of symmetry axes of an equilateral triangle = $\dots \dots \dots$. (1 or 2 or 2 or 3)
- 7) The area of the triangle of base length 8 cm and its corresponding height 6 cm = $\dots \dots \dots$ cm². (48 or 24 or 14 or 10)
- 8) $\mathbb{E} \cup \odot = \dots \dots \dots$. (\mathbb{E} or \odot or \emptyset or \mathbb{N})
- 9) The following table shows the recorded temperatures of 40 cities on a day:

Sets	20-	22-	24-	26-	28-	Total
Number of cities	7	9	11	8	5	40

The number of cities with temperatures less than 24 degrees Celsius = $\dots \dots \dots$ cities.
(11 or 16 or 20 or 17)

- 10) If the area of a parallelogram = 24 cm² and its base length = 4 cm, then its corresponding height = $\dots \dots \dots$ cm. (4 or 5 or 6 or 2)
- 11) The area of the rhombus in which the length of its side is 10 cm and corresponding height is 9.6 cm = $\dots \dots \dots$ cm². (96 or 69 or 48 or 84)
- 12) The following frequency distribution shows the marks of a group of students in an exam:

Sets	5-	10-	15-	20-	25-	Total
Number of students	3	6	$\dots \dots \dots$	13	5	35

The number in the blank space in the table is $\dots \dots \dots$. (6 or 7 or 8 or 9)

13) In the opposite figure:

The length of \overline{AB} = $\dots \dots \dots$ length units.

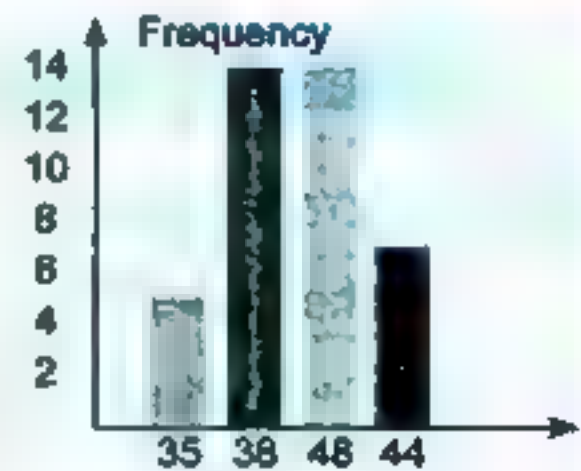


(3 or 4 or 5 or 6)

- 14) The area of the square whose perimeter is 32 cm = $\dots \dots \dots$ cm².
(128 or 32 or 64 or 1024)

2 Complete each of the following:

15) This representation of the data is called



16) 13 , 16 , 19 , , (in the same pattern)

17) The opposite transformation  represents18) If x is an odd number, then $(x + 1)$ is number.19) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$ 20) If the sum of two numbers x and y is 20, then $y = \dots$

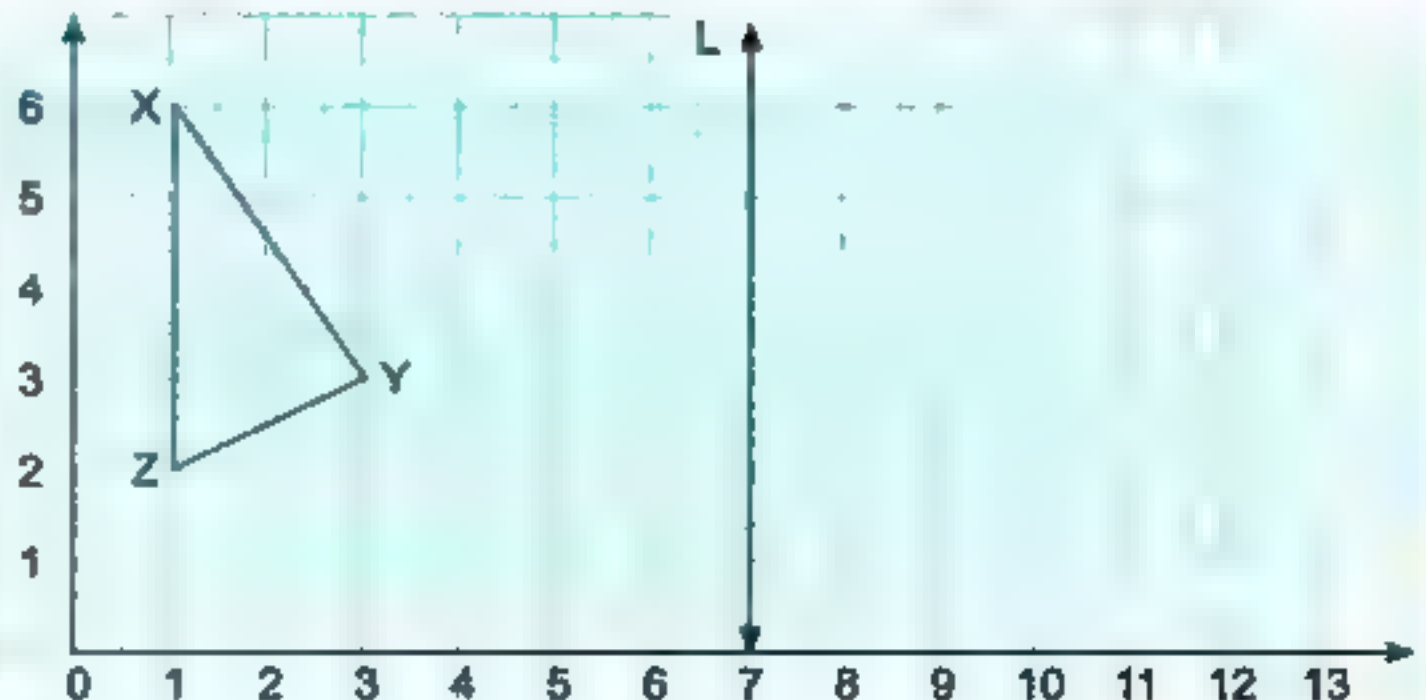
21) The number of axes of symmetry of a rhombus =

22) The diameter length of the circle whose circumference is 88 cm = cm. ($\pi = \frac{22}{7}$)**3** Find the result:23) By using the properties of multiplication in N , find $8 \times 17 \times 125$

24) Which is greater in area, a rhombus whose diagonal lengths are 6 cm and 8 cm or a square whose diagonal is 8 cm?

25) Solve the equation of: $x - 7 = 33$, $x \in N$.

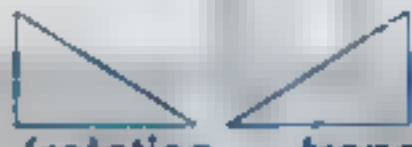
26) In the coordinate plane,
if L is the axis of reflection
of the shape XYZ draw
its image by reflection
in L .



23

Qena Governorate Dishna Official Language Schools

1 Choose the correct answer:

- 1) The multiplicative natural element in \mathbb{N} is (0 or 1 or 2)
- 2) $x + 8 = 15$, $x \in \mathbb{N}$, then $x = \dots\dots\dots$ (7 or 3 or 6)
- 3) The number of axes of symmetry of a rectangle is (0 or 2 or 1)
- 4) 7 is subtracted from $x = \dots\dots\dots$ ($7 - x$ or $x - 7$ or $7 + x$)
- 5) The base length of a triangle is 8 cm, and its height is 5 cm, then its surface area
= cm^2 . (20 cm^2 or 30 cm^2 or 40 cm^2)
- 6) The smallest counting number is (0 or 1 or 2)
- 7) $(4 \times \dots\dots\dots) \times 78 = 7800$. (5 or 10 or 25)
- 8) If $3x = 6$, $x \in \mathbb{N}$, then $x = \dots\dots\dots$ (4 or 6 or 2)
- 9) Area of square of diagonal 8 cm is cm^2 . (64 or 11 or 32)
- 10) The isosceles triangle has line(s) of symmetry. (0 or 1 or 2)
- 11) The area of the rhombus whose diagonal lengths are 12 cm, and 16 cm = cm^2 . (56 or 96 or 129)
- 12) $\{2, 3\} \dots\dots \mathbb{N}$. (\in or \notin or \subset or \supset)
- 13) The opposite geometric transformation is  (rotation or translation or reflection)
- 14) $999 + 53 = 53 + 999$ is called property. (commutative or closure or associative)

2 Complete each of the following:

- 15) 1, 4, 8, 13, (in the same pattern).
- 16) The number of axes of symmetry of the rhombus =
- 17) $12 \times 7 = 7 \times \dots\dots\dots$
- 18) A circle of radius length 7 cm, its circumference = cm. ($\pi = \frac{22}{7}$)
- 19) Area of parallelogram = \times
- 20) The additive natural element in \mathbb{N} is
- 21) $x + 3 = 5$, $x \in \mathbb{N}$ then $x = \dots\dots\dots$

22) The smallest natural number is

23) The smallest odd number is

24) $33 + 299 = 299 + \dots$

3 Find the result:

25) Find the area of rhombus whose side length is 10 cm and height is 6 cm.

26) Use the properties to find the value of $2 \times 48 \times 5$

27) Calculate the circumference of the circle whose diameter length is 7 cm. ($\pi = \frac{22}{7}$)

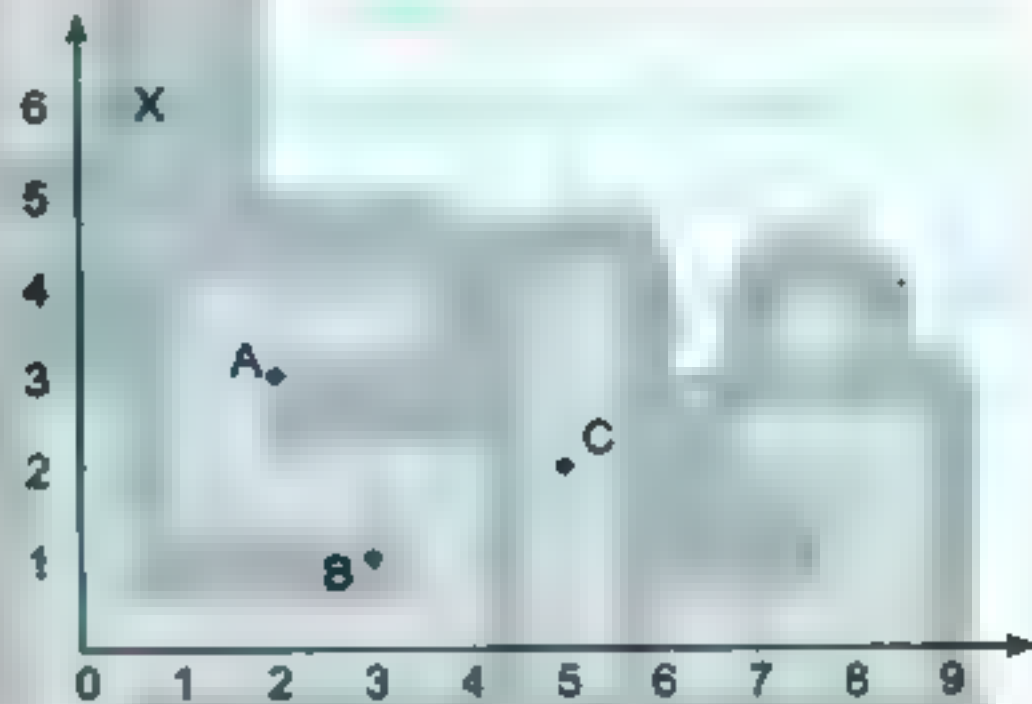
28) Solve the equation: $2x + 9 = 21$, $x \in \mathbb{N}$.

29) From the following coordinate plane complete:

A (.....,

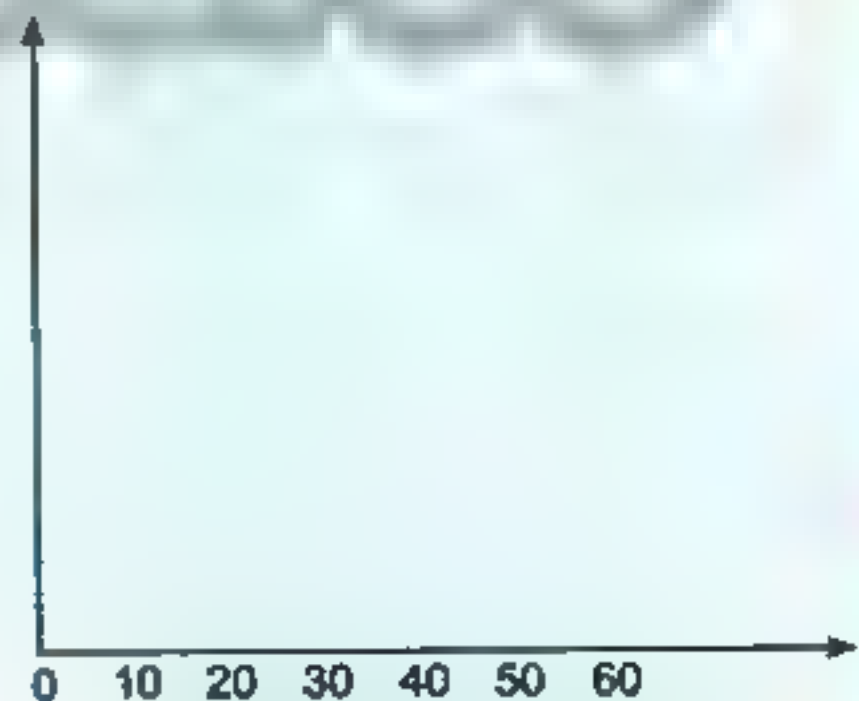
B (.....,

C (.....,



30) Use the following table to draw frequency polygon:


Sets	10–	20–	30–	40–	50–	Total
Frequency	2	5	3	4	1	15



24

Sohag Governorate Maths Supervision

1 Choose the correct answer:

- 1) The isosceles triangle has line(s) of symmetry. (1 or 2 or 3 or 4)
- 2) $\frac{0}{7}$ \mathbb{N} . (\in or \notin or \subset or \supset)
- 3) The circumference of a circle with diameter length 14 cm = ($\pi = \frac{22}{7}$)
(7 or 44 or 28 or 16)
- 4) The multiplicative identity element in (\mathbb{N}) is (0 or 1 or 2 or 3)
- 5) The smallest counting number is (0 or 1 or 2 or 3)
- 6) The number of altitudes of the triangle is (1 or 2 or 3 or 4)
- 7) If $x + 3 = 5$, $x \in \mathbb{N}$, then $x =$ (1 or 2 or 3 or 4)
- 8) The area of the rhombus whose diagonal lengths are 6 cm and 8 cm = cm^2 .
(48 or 20 or 24 or 40)
- 9) The area of the square whose diagonal length is 6 cm = cm^2 .
(18 or 36 or 12 or 6)
- 10) The triangle whose base length is 5 cm and the corresponding height of it is 8 cm, its area = cm^2 . (13 or 20 or 26 or 40)
- 11) A parallelogram of area 36 dm^2 and the length of its base is 4 dm,
then the corresponding height = dm. (18 or 9 or 8 or 12)
- 12) 5 is subtracted from twice the number $x =$
($5 - x$ or $2x - 5$ or $5x + 2$ or $5 - 2x$)
- 13) The opposite geometric transformation is 
(rotation or translation or reflection)
- 14) $(4 \times 31) \times 25 = (31 \times \dots) \times 25$ (2 or 4 or 3 or 5)

2 Complete each of the following:

- 15) $75 + 89 = 89 + 75$ (..... property)
- 16) Area of parallelogram = \times
- 17) The number of axes of symmetry of a square is
- 18) If $x \in \mathbb{N}$, $2x = 8$, then $x =$

19) $\frac{\text{The circumference of the circle}}{\text{The length of the diameter}} = \dots\dots\dots$

20) $\mathbb{E} - \mathbb{N} = \dots\dots\dots$

21) $213 + 57 = 57 + \dots\dots\dots$

22) Use \in or \notin : $0.15 \dots\dots \mathbb{N}$.

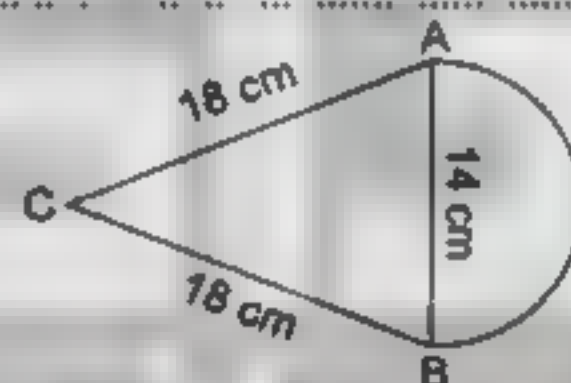
Find the result:

23) Solve the equation in \mathbb{N} : $5x - 2 = 8$

24) Using the commutative and associative properties, find the product of $5 \times 37 \times 2$

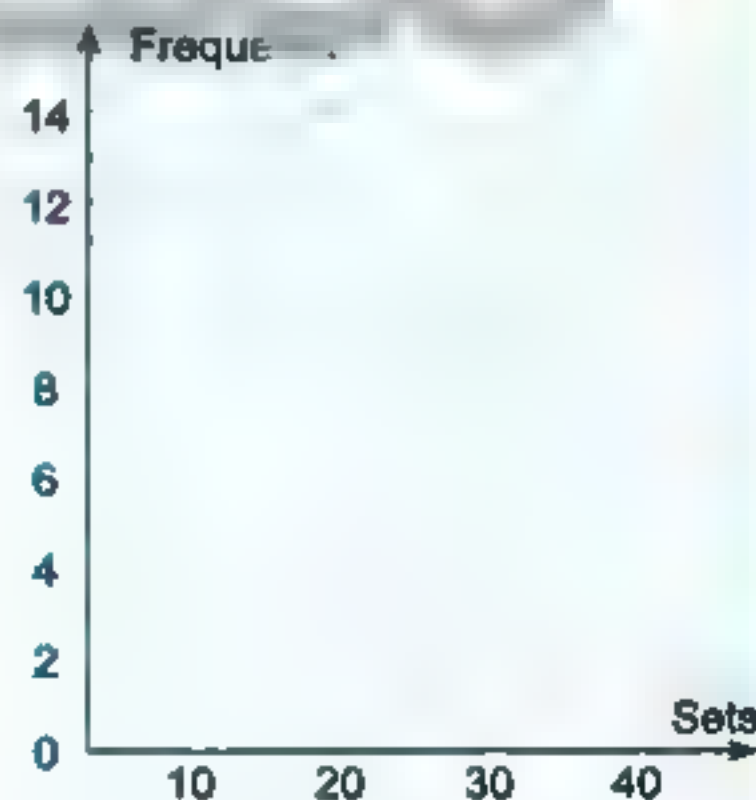
25) Find the area of the rhombus whose side length is 5 cm and height is 3 cm.

26) Calculate the perimeter of the opposite figure where AB is the diameter of the circle, $AB = 14$ cm. $(\pi = \frac{22}{7})$



27) Represent the following by frequency polygon.

Sets	10–	20–	30–	40–	Total
Frequency	8	10	14	8	40



b) $DC = 828 + 23 = 36 \text{ cm}$

$$\begin{aligned}\text{area of } \triangle DCE &= \frac{1}{2} EC \times DC \\ &= \frac{1}{2} (35 - 23) \times 36 \\ &= 6 \times 36 = 216 \text{ cm}^2\end{aligned}$$

c) $(25 \times 4) \times 9892 = 989200$

Exam 3

Left to the pupil.

Answers of Pre-exam Final Revision

First:

- | | | | |
|-------------------------|------------------------|----------------------|------------------|
| 1) 81, 243 | 2) 44 cm | 3) 50 cm^2 | 4) $x = 3$ |
| 5) 213 | 6) 0 | 7) 24 cm^2 | 8) odd |
| 9) base \times height | | 10) $n + 3$ | 11) 5 |
| 12) 1 | 13) 88 | 14) 10 | 15) even |
| 16) 210, 280 | 17) (4, 4) | 18) 1 | 19) 2 |
| 20) zero | 21) 31.4 | 22) 12 | 23) 20 |
| 24) 43 | 25) 0 | 26) 13 | 27) $L \times w$ |
| 28) 10.1 | 29) 200 cm^2 | 30) height | |
| 31) 128, 512 | 32) distributive | 33) (0) | |

Second:

- | | | | |
|----------------|------------------------------------|-----------------------|-----------------------|
| 1) 2 | 2) 3 | 3) 220 | 4) 297 |
| 5) \in | 6) 16 | 7) is not possible | |
| 8) 2 | 9) 100 | 10) translation | 11) 14 cm^2 |
| 12) reflection | 13) $(8 \times 50) + (8 \times 4)$ | 14) 10 | |
| 15) $x - 3$ | 16) (2, 2) | 17) $2\pi r$ | 18) 3 |
| 19) rotation | 20) 1 | 21) $3x$ | 22) \in |
| 23) 9 | 24) 25 | 25) 49 cm^2 | |

Third:

- 1) a) $75 + 25 + 16$ comm.
 $= (75 + 25) + 16$ associative $= 100 + 16 = 116$
- b) Area of $\triangle = \frac{1}{2} \times 6 \times 5 = 15 \text{ cm}^2$.
 Area of rhombus $= \frac{1}{2} \times 7 \times 4 = 14 \text{ cm}^2$.
 Area of the \triangle is greater.

2) a) $BC = 3 \text{ cm}$, area $= 6 \text{ cm}^2$ b) $14 - x$

3) a) Area $= 5 \times 5 = 25 \text{ cm}^2$ b) Left to the pupil

4) a) $X = \{5, 6\}$ b) Left to the pupil.
 c) $AB = 4$ units

5) a) $38 + 62 + 47 + 53$ commutative
 $= (38 + 62) + (47 + 53)$ associative
 $= 100 + 100 = 200$.

b) Area of $\triangle = \frac{1}{2} \times 18 \times 12 = 108 \text{ cm}^2$.
 Area of the rhombus $= \frac{1}{2} \times 24 \times 8 = 96 \text{ cm}^2$.
 Area of \triangle is greater.
 c) Draw it by yourself.

Answers of Model Tests from the School Book

Model 1

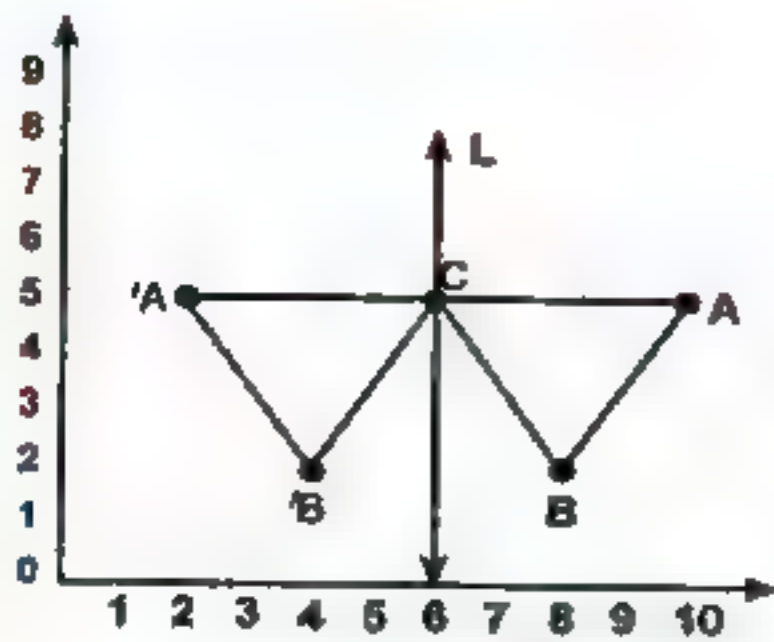
- | | | | |
|-------------|------------|----------------------------|---------------|
| 1. 1) \in | 2) {2} | 3) $(2r + 3)$ | 4) 0 |
| 5) 3¢ | 6) $m < n$ | 7) 8 | 8) reflection |
| 9) 4 | 10) 96 | 11) 4 | |
| 12) 50 | 13) 40 | 14) 18 | |
| 2. 15) 22 | 16) $5x$ | 17) (0, 1) | 18) 18 |
| 19) itself | 20) 44 | 21, 22) left to the pupil. | |

3. 23) The other number $= 35 - x$

24) $(53 + 47) + 67$ (associative, commutative)
 $= 100 + 67$ (add. operation)
 $= 167$.

25) The area of $\triangle ABC = \frac{1}{2} \times 6 \times 8 = 24 \text{ cm}^2$.
 $AD = \frac{2 \times 24}{10} = 4.8 \text{ cm}$.

26)



Model

2

1. 1) 2, 2) \emptyset 3) 88 4) 0
 5) 5 6) \in 7) 32 8) 24
 9) no. (3) 10) 45 11) 30
 12) 5 13) 64 14) (1, 4)

2. 15) even 16) $n < m$ 17) $(x + 3)$ 18) 96
 19) axis of symmetry 20) 213

3. 21) 8 22) 150

$$\begin{aligned} 23) 45 \times 10 + 45 \times 2 \\ = 450 + 90 \\ = 540 \end{aligned}$$

$$\begin{aligned} 24) x - 7 + 7 &= 33 + 7 \\ x &= 40 \quad \text{S.S.} = \{40\} \end{aligned}$$

- 25) The area of the square $= 10 \times 10 = 100 \text{ cm}^2$
 $EC = 15 - 10 = 5 \text{ cm.}$
 Area of $\triangle DCE = \frac{1}{2} \times 5 \times 10 = 25 \text{ cm}^2$.
 Area of ABED = area of ABCD + area of DCE
 $= 100 + 25 = 125 \text{ cm}^2$.

26) Left to the pupil.

Model

3

Left to the pupil.

Answers of some School Examinations

1 - Caro Governorate - Maadi Educational Directorate

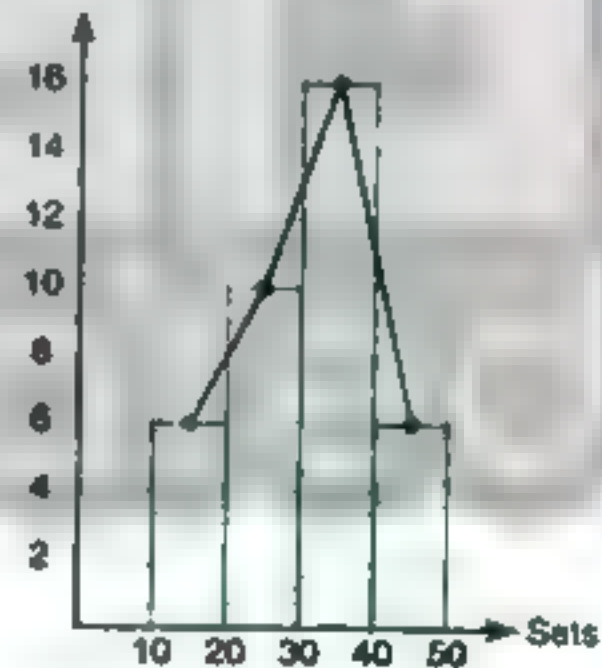
1. 1) $7 - x$ 2) \in 3) rotation
 4) additive identity 5) $\{4\}$ 6) 5
 7) 6 8) $10 - x$ 9) \notin
 10) even 11) $\{2\}$ 12) wrong
 13) 300 14) 3

2. 15) 3 16) 18 cm^2
 17) 1 18) 48 19) base length \times height
 20) $\{4, 5, 6, 2, 3\}$ 21) $\{0, 2, 4, 6, 8\}$
 22) $\frac{1}{2} \times \text{length of } 1^{\text{st}} \text{ diagonal} \times \text{length of } 2^{\text{nd}} \text{ diagonal}$

3. 23) a) $3x = 14 - 8$, $3x = 6$, $x = \frac{6}{3} = 2$
 b) $\frac{1}{2} \times 6 \times 4 = 3 \times 4 = 12 \text{ cm}^2$

4. The circumference $= 2\pi r$
 $= 2 \times \frac{22}{7} \times 21^3 = 132 \text{ cm}$

5. a) $25 \times (8 + 2) = 25 \times 10 = 250$
 b)



2 - Caro Governorate - New City Educational Zone - Alsun Modern School

1. 1) 53 2) $\{0, 1, 2, 3, 4\}$ 3) \in
 4) \emptyset 5) 5 6) 20 7) 1
 8) translation 9) 5
 10) commutative 11) 100 12) 22
 13) 5 14) 3 L

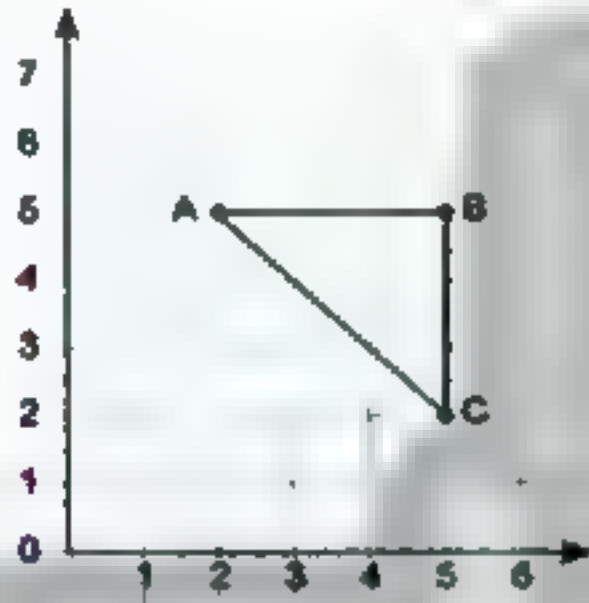
2. 15) zero, 1 16) 4 17) 22

- 18) 4 19) \mathbb{N} 20) 3 21) $(5 + 7)$
 22) a) $x + 7$ b) $x - 5$

3. 23) a) $4 \times 25 \times 19$ (commutative)
 $= (4 \times 25) \times 19$ (associative)
 $= 100 \times 19 = 1900$
 b) $64 + 36 + 81 + 19$ (commutative)
 $= (64 + 36) + (81 + 19)$ (associative)
 $= 100 + 100 = 200$

24) $x = 2 + 5$, $x = 7$

25)



$AB = 5 - 2 = 3$ units length

- 26) $X \cap Y = \{4\}$, $X \cup Y = \{1, 2, 3, 4, 5, 6\}$
 $X - Y = \{1, 2, 3\}$

4. Left to the pupil.

3 Giza Governorate - Andeen Zone - Mohamed Fard O L S

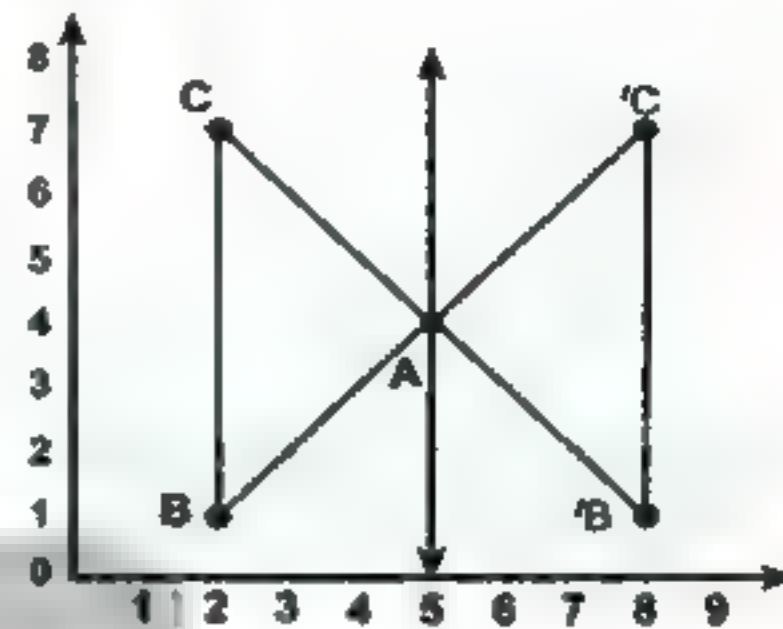
1. 1) \in 2) 0 3) 35
 4) 5 5) $2y$ 6) reflection
 7) 5 8) $10 - x$ 9) 15
 10) 8 11) 30 12) 18
 13) (3) 14) 28

2. 15) \emptyset 16) Zero 17) 2 18) $\{1, 0\}$
 19) 4 20) A (the same point) 21) 16 cm^2
 22) 19
 23) $(33 + 67) + 76$
 $= 100 + 76 = 176$

- 24) $\{3, 4, 5, \dots\}$



25)



- 26) The area of the figure =
 area of square ABCD + area of triangle CDE
 $= 8 \times 8 + \frac{1}{2} \times 4 \times 8$
 $= 64 + 16 = 80 \text{ cm}^2$

4 Giza Governorate - El Haram Directorate - Fadi Language School

1. 1) $x + 3$ 2) 8π 3) 18
 4) \in 5) 24 6) 3 L
 7) translation 8) 5 9) commutative
 10) $M > N$ 11) 0 12) histogram
 13) \emptyset 14) 7

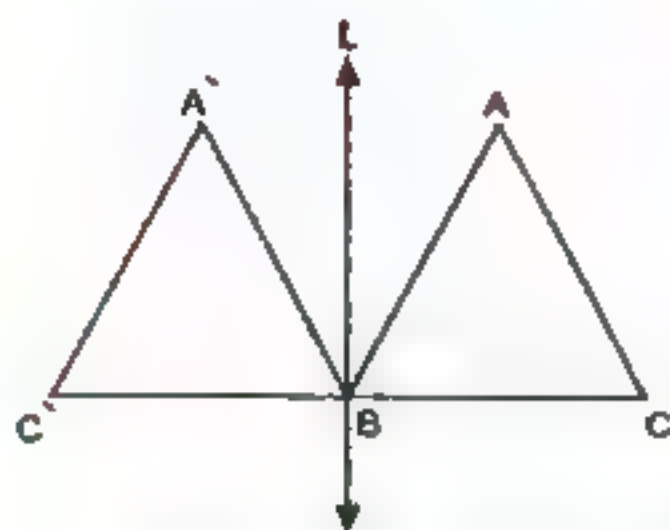
2. 15) 2 16) 50 17) 4 18) 4
 19) B 20) 16 21) odd 22) 20

3. 23) $8 \times 125 \times 117$ (commutative)
 $= (8 \times 125) \times 117$ (associative)
 $= 1000 \times 117 = 117000$

24) $2x = 5 + 3$, $2x = 8$, $x = \frac{8}{2} = 4$

25) The circumference $= 2 \times \pi \times r$
 $= 14 \times \frac{22}{7} = 44 \text{ cm}$

26)



5

Giza Governorate - Maths Inspection

1. 1) $2\pi r$ 2) $y + 3$ 3) \in
 4) 4 5) 16 6) 5
 7) 36 8) 6 9) \in
 10) \in 11) 20 12) 28
 13) 24 cm^2 14) 0
2. 1) its diagonals 2) even
 3) base \times its height 4) 75
 5) $\{4, 3, 2, 1, 0\}$ 6) $A = 4, B = 9$
 7) 32 8) 81

3. 1) $x + 7 = 15$

then $x + 7 - 7 = 15 - 7$

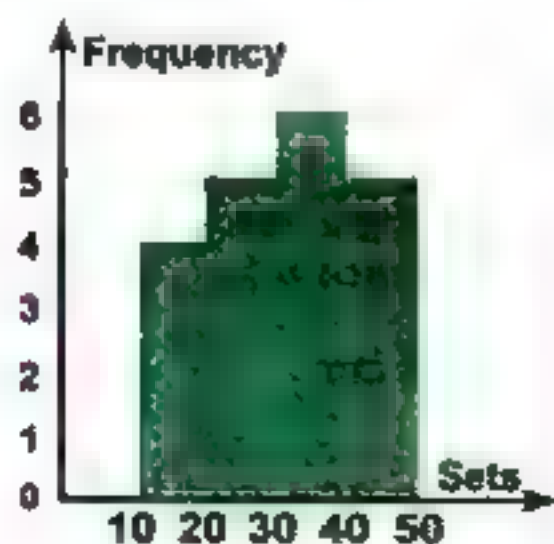
$x = 8$

2) $20 + 55 + 80 + 45$
 $= (20 + 80) + (55 + 45)$
 $= 100 + 100 = 200$

3) The circumference of the circle $= 2\pi r$

$= 2 \times \frac{22}{7} \times 14 = 88 \text{ cm}$

4)

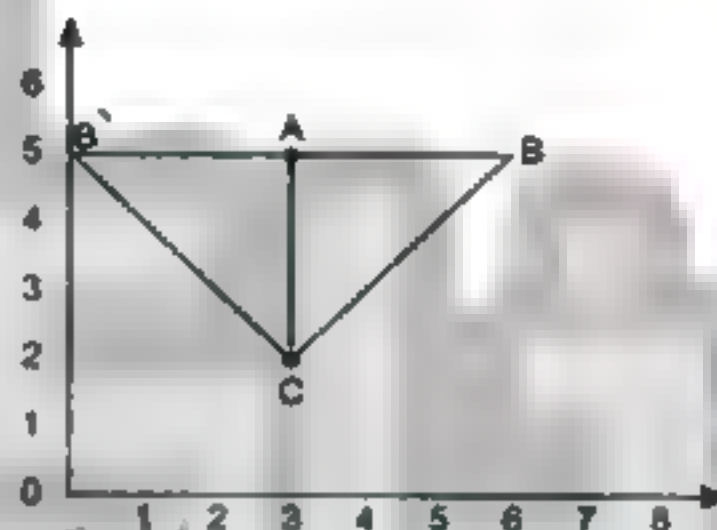


26

6

Alex Governorate - El Montazah Zone - Maths Supervision

1. 1) $21 - x$ 2) 50 3) 2 4) 4
 5) even 6) 4 7) 10 8) $2y - 3$
 9) 4 10) 44 11) 48 12) 28
 13) reflection 14) 15
2. 15) 31.4 16) zero 17) 4 18) 18 cm^2
 19) no 20) $y + 5$ 21) 24 22) 2, 1, 0
3. 23) $4 \times 25 \times 17$ (commutative)
 $= (4 \times 25) \times 17$ (associative)
 $= 100 \times 17 = 1700$
 24) $3x = 10 + 5, 3x = 15, x = \frac{15}{3} = 5$
 25)



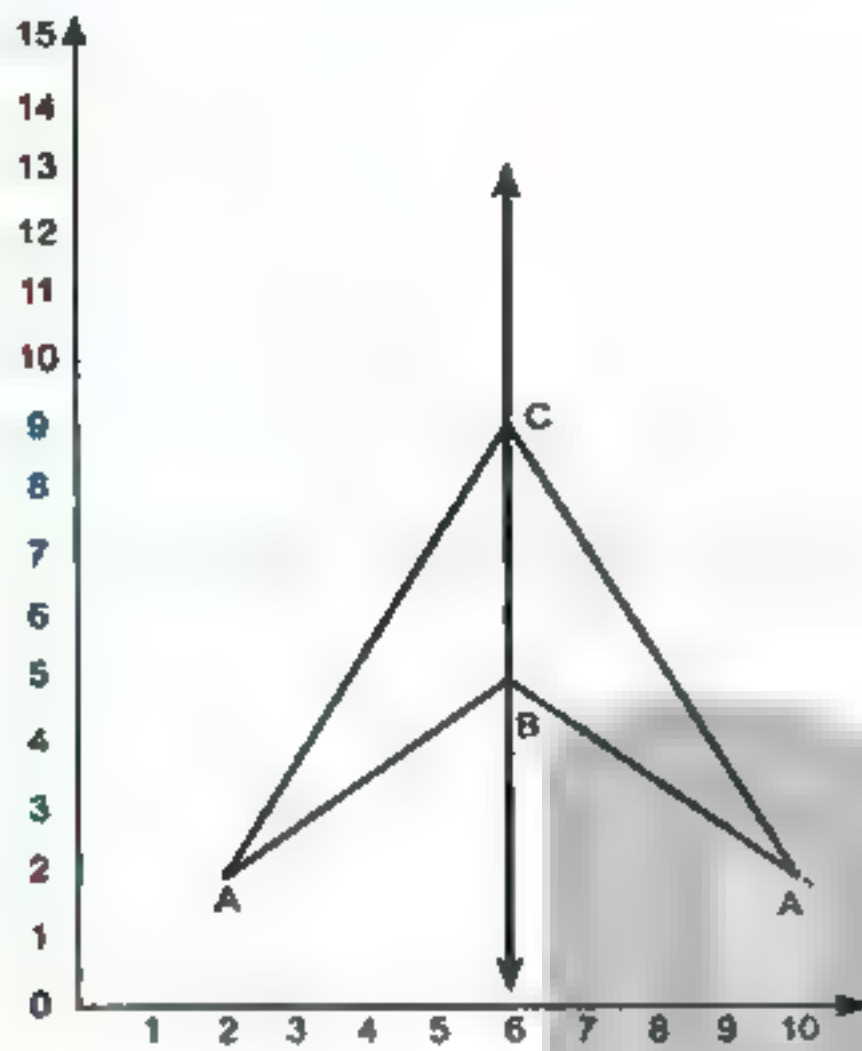
The image of ΔABC is $A'B'C'$ by reflection in \overline{AC} .

7

Alex Governorate - El Montazah Zone - Math Language School

1. 1) $2x + 7$ 2) 0 3) commutative
 4) \emptyset 5) 25 cm^2 6) $20 - y$
 7) \in 8) 3 L 9) \in
 10) 24 cm^2 11) 30 12) 4
 13) reflection 14) $\{0, 1\}$
2. 1) 24 cm^2 2) 44 cm
 3) even number. 4) π
 5) $M < N$ 6) 96 cm^2
 7) 99 8) 8, 5

3. a) $\triangle ABC$ is the image of $\triangle ABC$ by reflection in \overleftrightarrow{BC}



b) $2x + 9 = 21$

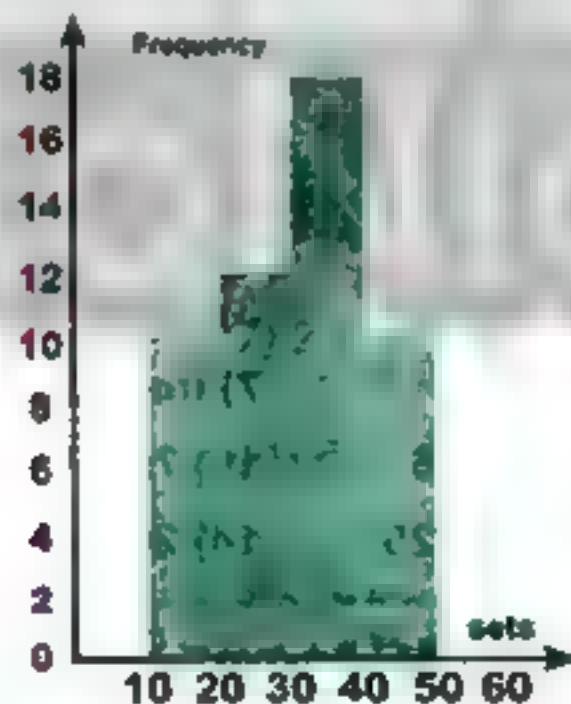
$$2x + 9 - 9 = 21 - 9$$

$$2x = 12 \text{ then } \frac{2x}{2} = \frac{12}{2}$$

$$\text{Then } x = 6 \Rightarrow \text{s.s} = \{6\}$$

c) The perimeter of figure = perimeter of half circle + $10 + 10$
 $= \frac{1}{2} \times 7 \times \frac{22}{7} + 20 = 31 \text{ cm}$

4)



8

Qalubia Governorate - Maths Supervision -
Experimental Official L. Schools

- | | | | |
|----------------|----------|---------------------|--------|
| 1. 1) zero | 2) \in | 3) 18 | 4) 36 |
| 5) 5 | 6) 8 | 7) zero | 8) 50 |
| 9) $3 + x$ | 10) 24 | 11) is not possible | |
| 12) reflection | | 13) 16 | 14) 13 |

2. 15) a 16) 16, 32 17) $6 + 6 + 5 = 17 \text{ cm}$
 18) 9

- 19) 1) equal in length 2) perpendicular to each other
 20) half 21) 3 22) \overline{AE}

3. 23) $45 \times 10 + 45 \times 2 = 450 + 90 = 540$

24) $x = 12 - 3 = 9$

25) $= \frac{1}{2} \times 34 \times 15 = 17 \times 15 = 255 \text{ cm}^2$

26) Left to the pupil.

9

Gharbia Governorate - Gharbia Educational Directorate
Maths Supervision

- | | | | |
|-----------|-----------------|---------------|---------|
| 1. 1) {2} | 2) 4 | 3) 14 | 4) $3x$ |
| 5) 12 | 6) \subset | 7) 4 | 8) 64 |
| 9) even | 10) translation | 11) 1 | |
| 12) 20 | 13) 44 | 14) congruent | |

2. 15) 17 16) rotation 17) {0, 1, 2}
 18) 96 19) 2 20) 22, 25
 21) $3 + 2x$ 22) 10

3. 23) a) $8 \times 125 \times 117$ (commutative)
 $= (8 \times 125) \times 117$ (associative)
 $= 1000 \times 117 = 117000$

b) $2x = 21 - 9$, $2x = 12$, $x = \frac{12}{2} = 6$

24) a) Area of the rhombus = $\frac{1}{2} \times 8 \times 6 = 24 \text{ cm}^2$

Area of the square = $\frac{1}{2} \times 8 \times 8 = 32 \text{ cm}^2$,
 then the area of the square is greater than
 the area of the rhombus.

b) Left to the pupil

10

Dakakia Governorate - Maths Supervision

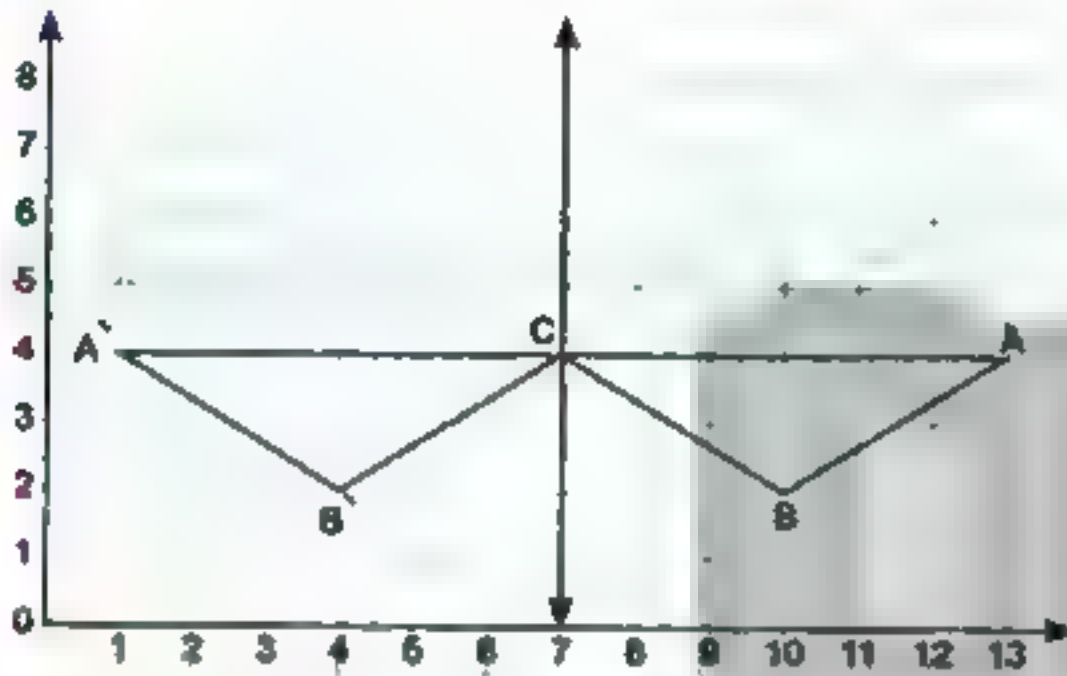
- | | | |
|--------------------|----------------------|-------------|
| 1. 1) {0, 1, 2, 3} | 2) 1 | 3) 8 |
| 4) $10 - x$ | 5) 18 cm^2 | 6) A itself |
| 7) zero | | |
| 2. 8) \notin | 9) $<$ | 10) 19 |
| | | 11) 25 |

- 12) $3 + x$ 13) 4 14) 14 15) 180
16) (1, 4) 17) 30 18) 64 19) 28

3. a) $872 + 128 + 199 + 801$ (commutative)
 $= (872 + 128) + (199 + 801)$ (associative)
 $= 1000 + 1000 = 2000$

b) $3x = 29 - 8$, $3x = 21$, $x = \frac{21}{3} = 7$

c)



d) 1) $\frac{1}{2} \times 12 \times 16 = 96 \text{ cm}^2$

2) Its side length $= 960 \div 96 = 10 \text{ cm}$

Its perimeter $= 10 \times 4 = 40 \text{ cm}$

e) Left to the pupil.

11 Kahr El Shelly Governorate - Math's Superstar

1. 1) \emptyset 2) 7 3) 9 4) 20
5) $\{0, 1, 2\}$ 6) 6 7) 2
8) 24 9) 18 10) $3y$ 11) 7
12) \in 13) 4 14) 1

2. 15) A itself 16) 1 17) 25, 3100
18) translation 19) π 20) $\{1, 3, 5, 7, \dots\}$
21) $4 - 5x$ 22) 24 cm^2

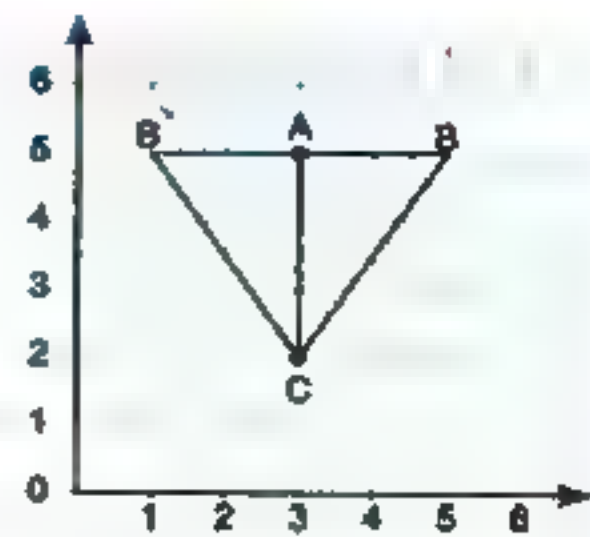
3. 23) a) $2x = 21 - 9$, $2x = 12$, $x = \frac{12}{2} = 6$

b) $45 \times (127 - 27)$ (distributive property)
 $= 45 \times 100 = 4500$

24) $60 \times 3 \text{ } 14 + 130 + 130$
 $= 1884 + 260 = 448.4 \text{ cm}$

25) a) $5 - 2 = 3$ unit length

b)



26) Left to the pupil.

12 Damietta Governorate - Official Language Schools

1. 1) 1 2) \notin 3) $x - 5$ 4) 4
5) base \times height 6) zero
7) distributive 8) 12 9) 18
10) 55 11) 31.5 12) 4
13) 2 14) 16

2. 15) 16 16) commutative
17) associative 18) $y + 3$ 19) reflection
20) 3 21) 2400 22) 8

3. 23) $2 \times 5 \times 347$ (commutative)
 $= (2 \times 5) \times 347$ (associative)
 $= 10 \times 347 = 3470$

24) $x = 12 - 3$, $x = 9$

25) $10 \times 3.14 = 31.4 \text{ cm}$ 26) Left to the pupil

13 Shadia Governorate - Dark Negr Educational Zone - El Sweeny Gov. Lang. School

1. 1) \notin 2) $\{2\}$ 3) 2 4) 3 L
5) 16 6) 1 7) translation
8) 5 9) 18 10) 70 11) 3.5
12) 84 13) 25 14) 20

2. 15) 1 16) an even 17) 32
18) $x + 3$ 19) 5 20) 5
21) commutative 22) quarter

3. 23) $8 \times 125 \times 73$ (commutative)
 $= (8 \times 125) \times 73$ (associative)
 $= 1000 \times 73 = 73000$

24) $3x = 8 - 2$, $3x = 6$, $x = \frac{6}{3} = 2$

25) The area of the rhombus

$$= \frac{1}{2} \times 6 \times 8 = 24 \text{ cm}^2$$

$$\text{the area of the square} = \frac{1}{2} \times 8 \times 8 = 32 \text{ cm}^2$$

then the area of the square is greater than

the area of the rhombus.

26) Left to the pupil.

14 Port Said Governorate – Educational Directorate – Maths Inspectorate

1. 1) reflection 2) $\{0, 1\}$ 3) A itself

4) 4 5) 18 6) $5x$

7) 22 8) 30–

2. 9) \in 10) \emptyset 11) $2x + 3$ 12) $<$

13) 96 14) 6 15) 30 16) 2

17) $20 - x$ 18) 40 19) $\frac{1}{2}$ 20) 0

21) 5 22) 0

3. 23) $4x = 33 + 7$, $4x = 40$, $x = \frac{40}{4} = 10 \text{ cm}$

24) $\frac{2}{14} \times \frac{22}{7} = 44 \text{ cm}$

25) $53 + 47 + 76 + 24$ (commutative)

$$= (53 + 47) + (76 + 24) \quad (\text{associative})$$

$$= 100 + 100 = 200$$

26) Left to the pupil.

15 Ismailia Governorate – Directorate of Educational Al-Manar Language School

1. 1) C 2) 18 3) $\{0\}$ 4) 2

5) $2M - 3$ 6) MATH MATH 7) 2 8) 60

9) 7 10) 5 11) 8 12) 13.5

13) 3 L 14) $\{2\}$

2. 15) an even 16) 21 17) $18 - x$

18) 4 19) zero 20) reflection

21) one 22) 2

3. 23) $\frac{1}{2} \times 10 \times 3.14 + 10 + 10$

$$= 15.7 + 20 = 35.7 \text{ cm}$$

24) $37 \times (100 + 1)$

$$= 37 \times 100 + 37 \times 1$$

$$= 3700 + 37 = 3737$$

25) $2x = 13 - 3$, $2x = 10$, $x = \frac{10}{2} = 5$

26) Left to the pupil.

16 Suez Governorate – Directorate of Educational Mathematics Inspectorate

1. 1) 0 2) 88 3) 0 4) 7

5) 64 6) 75 7) C 8) 8

9) C 10) $\{2\}$ 11) $<$ 12) \in

13) 4 14) 4

2. 15) 55, 40 16) $5x$ 17) A itself 18) 0, 1

19) commutative 20) 32, 40

21) 0, 1 22) 4.8 cm

3. a) The area of the rhombus

$$= \frac{1}{2} \times 6 \times 8 = 24 \text{ cm}^2$$

the area of the square

$$= \frac{1}{2} \times 8 \times 8 = 32 \text{ cm}^2$$

then the area of the square > the area of the rhombus

b) Left to the pupil.

4. a) 1) $(a + b - c) \times (a + b)$

$$= (4 + 3 - 0) \times (4 + 3) = 49$$

2) $45 \times (100 - 1)$

$$= 45 \times 100 - 45 \times 1$$

$$= 4500 - 45 = 4455$$

b) Left to the pupil.

17 South Sinai Governorate – Mathes Supervision

1. 1) \in 2) \emptyset 3) 8 4) 96

5) 0 6) $3x + 5$ 7) C 8) 4

9) 44 10) $<$ 11) $x + 8$

12) commutative 13) $20 - x$ 14) 100

2. 15) 9 16) 81 17) 18 cm^2

- 18) zero 19) A itself 20) 3 L
21) {0, 1, 2, 3, 4} 22) 5 x

3. 23) $2 \times 5 \times 347$ (commutative)
 $= (2 \times 5) \times 347$ (associative)
 $= 10 \times 347 = 3470$

24) $x + 6 = 26$

25) $\frac{1}{2} \times 12 \times 5 = 30 \text{ cm}^2$

26) Left to the pupil.

18 El-wadi Al Gadeed Governorate – El-Kharga Educational Directorate

1. 1) \notin 2) 18 3) even 4) 4
5) C 6) 96 7) 16 8) 3
9) commutative 10) 3 x 11) $N > M$
12) 88 13) 0 14) (1, 4)

2. 15) 96 16) 32 17) $3 + 2x$
18) 14 19) A itself 20) 1
21) 5 22) 50 cm^2

3. 23) $2x = 21 - 9$, $2x = 12$, $x = \frac{12}{2} = 6$ S.S = {6}

24) The area of $\Delta ABC = \frac{1}{2} \times 8 \times 6$
 $= 24 \text{ cm}^2$

$AD = \frac{24 \times 2}{10} = \frac{48}{10} = 4.8 \text{ cm}$

25) $45 \times 10 + 45 \times 2$
 $= 450 + 90 = 540$

26) Left to the pupil.

19 Fayoum Governorate – Maths Supervision

1. 1) \emptyset 2) {2, 3} 3) \notin 4) C
5) 4 x 6) $2\pi r$ 7) 30 8) 48
9) 50 10) 15 11) 11 12) 60
13) = 14) (2, 2)

2. 15) an even 16) 19
17) 1 18) $10 - x$
19) Histogram, frequency polygon

- 20) 2 21) A (7, 2), B (2, 2)
22) 5 unit length

3. 23) a) $25 \times 4 \times 37$ (commutative)
 $= (25 \times 4) \times 37$ (associative)
 $= 100 \times 37 = 3700$

b) $35 \times (118 - 18)$ (distributive)
 $= 35 \times 100 = 3500$

24) $2x = 21 - 9$, $2x = 12$, $x = \frac{12}{2} = 6$

25) $2 \times \frac{22}{7} \times \frac{2}{14} = 88 \text{ cm}$

26) The drawing is left to the pupil.

$A'(1, 10)$, $B'(1, 6)$, $C'(4, 6)$

20 Beni Suez Governorate – Directorate of Education – Directorate of Official Lang. Schools

1. 1) 0 2) 30 3) \in 4) $A < B$
5) 2 6) 0 7) translation
8) 12 9) histogram 10) 18
11) $\frac{1}{3}$ 12) 24 13) 19 14) 44

2. 15) 3 16) 0 17) 37
18) base length \times corresponding height
19) 1 20) an even
21) reflection 22) 11

3. 23) $2x = 15 - 3$, $2x = 12$, $x = \frac{12}{2} = 6$

24) $872 + 128 + 199 + 801$ (commutative)
 $= (872 + 128) + (199 + 801)$ (associative)
 $= 1000 + 1000 = 2000$

25) $10 \times 3.14 = 31.4 \text{ cm}$

26) Left to the pupil.

21 Minia Governorate – Kafr Elmansorah Formal Language Primary School

1. 1) \in 2) 0 3) $20 - x$ 4) 8
5) 18 6) $M < N$ 7) 4 8) 8
9) $\frac{1}{4}$ 10) odd 11) $>$ 12) 75
13) C 14) 3 L

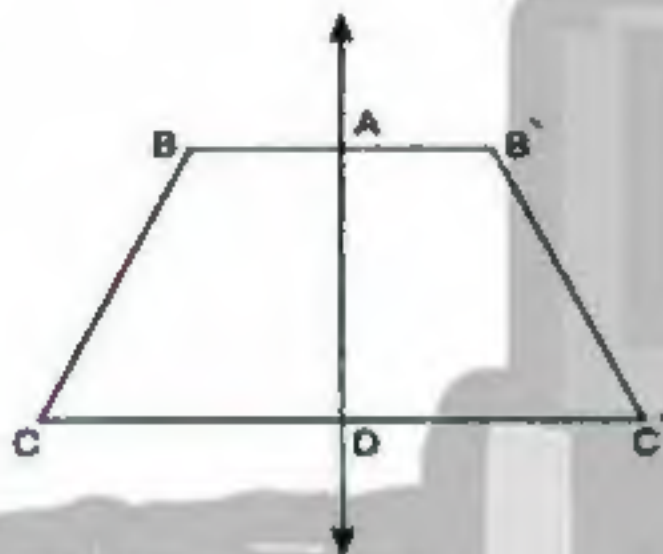
2. 15) $5x$ 16) an even 17) 96
 18) 35, 45 19) 100 20) $x + 8$
 21) $\{0, 1, 2, 3, 4\}$
 22) Counting numbers.

3. 23) $8 \times 125 \times 49$ (commutative)
 $= (8 \times 125) \times 49$ (associative)
 $= 1000 \times 49 = 49000$

24) a) $\frac{1}{2} \times 6 \times 8 = 24 \text{ cm}^2$

b) $AD = \frac{2 \times 24}{10} = 4.8 \text{ cm}$

25) a)



b) 4 units of length

22 Assuit Governorate – Administration of Governmental Language Schools

1. 1) C 2) 0 3) $x - 5$ 4) 220
 5) 1 6) 3 7) 24 8) N
 9) 16 10) 6 11) 96 12) 8
 13) 4 14) 64

2. 15) bar graph 16) 22, 25
 17) reflection 18) an even
 19) 4 20) $20 - x$ 21) 2 22) 28

3. 23) $8 \times 125 \times 17$ (commutative)
 $= (8 \times 125) \times 17$ (associative)
 $= 1000 \times 17 = 17000$

24) The area of the rhombus $= \frac{1}{2} \times 6 \times 8 = 24 \text{ cm}^2$
 , The area of the square
 $= \frac{1}{2} \times 8 \times 8 = 32 \text{ cm}^2$

The area of the square > area of the rhombus

25) $x = 33 + 7, x = 40$

26) Left to the pupil.

23 Gena Governorate – Doshna Educational zone

1. 1) 1 2) 7 3) 2 4) $x - 7$
 5) 20 cm^2 6) 1 7) 25 8) 2
 9) 32 10) 1 11) 96 12) C
 13) reflection 14) commutative

2. 15) 19 16) 2 17) 12
 18) 44 19) base length \times its height
 20) 0 21) 2 22) 0
 23) 1 24) 33

3. 25) The area of rhombus $= 10 \times 6 = 60 \text{ cm}^2$

26) $2 \times 48 \times 5 = (2 \times 5) \times 48$
 $= 10 \times 48 = 480$

27) The circumference of the circle
 $= 2\pi r = 7 \times \frac{22}{7} = 22 \text{ cm}$

28) $2x + 9 = 21, x \in \mathbb{N}$

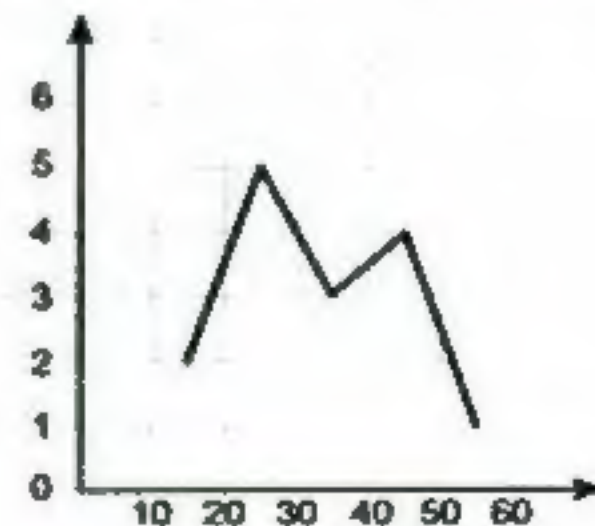
$2x + 9 - 9 = 21 - 9$

$2x = 12$

$\frac{2x}{2} = \frac{12}{2}$ Then $x = 6$

29) A (2, 3), B (3, 1), C (5, 2)

30) The frequency polygon of distribution



24 - Sohag Governorate - Maths Supervision

1. 1) 1 2) \in 3) 44 4) 1
 5) 1 6) 3 7) 2 8) 24
 9) 18 10) 20 11) 9 12) $2x - 5$
 13) reflection 14) 4

2. 15) commutative

16) base length \times its corresponding height

- 17) 4 18) 4 19) π
 20) \emptyset 21) 213 22) \notin

3. 23) $5x = 8 + 2$, $5x = 10$, $x = \frac{10}{5} = 2$

24) $5 \times 2 \times 37$ (commutative)

$= (5 \times 2) \times 37$ (associative)

$= 10 \times 37 = 370$

25) $5 \times 3 = 15 \text{ cm}^2$

26) $\frac{1}{2} \times \frac{2}{14} \times \frac{22}{7} + 18 + 18$

$= 22 + 36 = 58 \text{ cm}$

27) Left to the pupil.

ذاكر اولي
 RaNia SaYed